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COUNTY BOROUGH OF SOUTH SHIELDS.



**ANNUAL REPORT OF THE
MEDICAL OFFICER,
1914.**

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Vice-Chairman of the Health Committee—MR. ALDERMAN PETTLER.

Chairman of the Education Committee—MR. ALDERMAN HILTON.

Vice-Chairman of the Education Committee—

THE MAYOR (MR. ALDERMAN RICHARDSON).

Chairman of the Medical Inspection of School Children Sub Committee—

MR. COUNCILLOR LAWSON.

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W. CLARK, R. W. WEIR, R. AYRE, and W. HILL.

Inspector under the Shops Acts—W. SMITH.

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Miss E. LAMBTON (*Temporary*), Miss F. SWEENEY (*Temporary*).

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W. ATKINSON (*Temporary*).

Laborant—W. T. FOSTER.

Matron, Deans Isolation Hospital—Miss I. INGRAM.

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SUMMARY OF VITAL STATISTICS, ETC.

Population at 1911 Census	108,647
Population estimated to middle of 1914			110,604
Area of Borough	..	..	..	..	2,391 acres
Density of Population per acre	..	..	..		46.3
Births during 1914	..	..	..	..	3,517
Deaths during 1914	..	..	..	..	1,955
Birth-rate, 1914	..	..	..	..	31.8
Death-rate, 1914	..	..	..	..	17.7
Infant Mortality Rate, 1914	..	..	..	..	137
Tuberculosis death-rate : Pulmonary	..	..			1.31
Non-pulmonary			..		0.58
Total	..	..	..		1.89
Death-rate from all other notifiable infectious diseases					0.59
Number of Insured Persons, 31st December, 1914					40,162

PREFACE.

The work dealt with in this, my fourth Annual Report, is that carried out during the year 1914. The following matters may be specially referred to :—

The increased incidence of Scarlet Fever which occurred in 1913, and carried over into the year under consideration (p. 8).

The incidence of Enteric Fever during the latter part of the year (p. 12).

A report on the first complete year's work of the Tuberculosis Clinic (p. 34).

The progress made with a scheme for a New Hospital and Sanatorium for the Borough (p. 42).

A general reference to the question of Maternity and Infant Welfare (p. 70).

The adoption of the Notification of Births Act, 1907 (p. 81).

A note regarding co-operation with the Military Authorities (p. 85).

The work of the School Clinics (p. 108).

D.M.M.

VITAL STATISTICS : DEATHS, Etc.

(A) POPULATION AND AREA.

Estimated Mid-Year Population.

The Registrar-General states in his report for the fourth quarter of 1914 that the population of England and Wales as a whole has hitherto been estimated on the assumption that the rate of increase during 1901-11 has continued, but in view of the fall in the rate of natural increase since 1911 and an increase in the loss by migration a new estimate has been made for the middle of 1914, based upon the returns of births, deaths, and migration.

The mid-year population (June 30th, 1914), as estimated by the Registrar-General in accordance with the revised method, was 110,604.

Area, and density of Population.

On the mid-year population as estimated above, the density of population is 46 persons per acre.

“Area,” for Census purposes, is defined as “land together with inland water” : and excludes foreshore and tidal water.

The total area of the Borough, as thus defined, is 2,391 acres. (The *geographical* area includes, in addition to this, the following :—tidal water, 95 acres ; and foreshore down to high water mark, 159 acres.) Of this area, 1,186 acres are occupied by domestic buildings ; and the remainder is largely taken up by railway stations and sidings, docks, works, factories, etc., and by public parks.

The Borough has a peculiar geographical position, being situated on a promontory which is bounded on the East and North-East by the sea, and on the West and North-West by the River Tyne. This fact has an important bearing on the question of its further development ; the general trend of any expansion must of necessity be Southwards in direction.

(B) BIRTHS.

Birth-Rate.

There were 3,517 births registered in the Borough during the 52 weeks ending January 2nd, 1915. These included 14 births transferred by the Registrar-General.

This corresponds to a *birth-rate of 31.8 per 1,000 of the population, per annum.*

Forty-eight twin births (96 children) are included in the births occurring during the year.

Comparison of Birth-Rate with Rates for Country generally.

	Per 1,000 of Population.
England and Wales.....	23.8
97 Great Towns, including London.....	25.0
145 Smaller Towns.....	23.9
England and Wales, less the 242 Towns.....	22.2
London.....	24.3
Durham Administrative County.....	31.1
South Shields.....	31.8

Distribution (Sexes : Legitimacy).

The proportion of male to female births was 1,079 : 1,000.

The percentage of illegitimate births was 3.4 as compared with 3.6 for 1913.

The distribution is shown in the following Table:—

Births.	Males.	Females.	Totals.
Legitimate	1,760	1,639	3,399
Illegitimate	65	53	118
Total	1,825	1,692	3,517

The number of births in each Ward is given on page 144.

(C) DEATHS.**Death-Rate.**

1,955 deaths occurred during the year, *the death-rate being 17.7 per 1,000 of the population.*

The death-rates since 1901 are as follows:—

1901	20.6	per 1,000.
1902	19.8	„
1903	17.6	„
1904	18.9	„
1905	17.1	„
1906	19.0	„
1907	18.0	„
1908	16.8	„
1909	16.6	„
1910	15.2	„
1911	17.4	„
1912	16.0	„
1913	17.9	„
1914	17.7	„

The standardized death-rate for 1914, corrected for age and sex distribution in accordance with the 1911 census, is 18.3.

Seasonal Death-Rate.

The following gives the deaths and death-rates for each quarter of the years 1913 and 1914 :—

	No. of Deaths.		Death-rate.	
	1913.	1914.	1913.	1914.
First Quarter	580	589	20.9	21.3
Second Quarter	433	474	15.7	17.1
Third Quarter	413	466	14.9	16.9
Fourth Quarter	585*	426	19.7	15.4

*14 weeks.

Sex-Distribution of Deaths.

Of the total deaths, 1,072 were males and 883 females, a proportion of 1,214 : 1,000.

The proportion of male to female *births* was, as mentioned on page 2, slightly less than 11 to 10 ; while the *deaths* were in the proportion of rather more than 12 to 10 ; that is, although the number of males born exceeds the number of females, the excess is more than balanced by the fact that the males die off more rapidly than the females.

Transferable Deaths.

217 deaths occurred *outside* the Borough (156 being in the South Shields Union Poor Law Institution) among persons belonging to the Borough. These 217 are included in the total number of deaths (1,955) stated above.

15 deaths occurred *within* the Borough among persons belonging to other districts. These have been transferred to the districts concerned, and are not included in the total deaths for South Shields.

Deaths in Public Institutions.

The number of deaths of South Shields residents which occurred in Public Institutions during the year is as follows :—

In the South Shields Union Poor Law Institution	156
In other Institutions outside the Borough	39
In the Ingham Infirmary, South Shields	51
In the Borough Isolation Hospital, South Shields	21
In the Nursing Home, Wellington Terrace, South Shields	1

This makes a total of 268, which is 14 per cent. of all the deaths during the year. In the years 1911, 1912, 1913, the percentage was 14, 16, and 14 respectively. It is noteworthy that in London no less than 46 per cent. of the deaths registered during 1914 occurred in Public Institutions. For the whole of England and Wales the percentage was 22.

Coroners' Inquests.

Coroners' inquests were held regarding 93 deaths—that is, in 4.8 per cent. of the total deaths during the year.

66 of these deaths were due to various forms of Violence. (See Table 3, page 140).

Uncertified Deaths.

67 deaths (3.5 per cent. of the total deaths) were not certified by medical practitioners or by the Coroner. Of this number, 23 were infants under one year old ; and 10 were children aged one to five years.

Infant Mortality.

(a) RATES.—There were 482 deaths of infants under one year old. This corresponds to an *Infant Mortality Rate of 137 per 1,000 births*. The Infant Mortality Rate is further considered in connection with Maternity and Infant Welfare, page 70.

There were 18 deaths in illegitimate infants under one year old ; giving an *Illegitimate Infant Mortality Rate of 153 per 1,000 births*.

The Infant Mortality Rates for the past fourteen years are as follows :

1901	.....	169	per 1,000 Births.
1902	.....	149	„ „
1903	.....	132	„ „
1904	.....	144	„ „
1905	.....	145	„ „
1906	.....	150	„ „
1907	.....	133	„ „
1908	.....	133	„ „
1909	.....	138	„ „
1910	.....	111	„ „
1911	.....	147	„ „
1912	.....	106	„ „
1913	.....	117	„ „
1914	.....	137	„ „

(b) CAUSES OF INFANT DEATHS.—A summary of the causes of infant deaths is given in the Tables on pages 143 and 144.

Deaths from Tuberculosis.

Tuberculosis was responsible for *no less than 11 per cent. of all the deaths* recorded in the Borough in 1914. The deaths from the disease were as follows :—

Deaths from Tuberculosis of the Lungs	145
Deaths from other forms of Tuberculosis	64
Total	<u>209</u>

This gives a *Tuberculosis Death-rate* of 1.89 per 1,000 of the population.

In my Annual Report for 1911 I showed that Pulmonary Tuberculosis had not appreciably diminished as a proportional factor in the South Shields death-rate during the past forty years. I may re-state here the figures for the years 1901-1914 —

	Per cent. of Total Deaths.
In 1901, Pulmonary Tuberculosis caused	7.9
„ 1902,	9.0
„ 1903,	9.8
„ 1904,	8.4
„ 1905,	7.0
„ 1906,	8.3
„ 1907,	9.4
„ 1908,	7.7
„ 1909,	7.3
„ 1910,	8.2
„ 1911,	6.9
„ 1912,	9.6
„ 1913,	7.4
„ 1914,	7.4

Of the 145 deaths from Pulmonary Tuberculosis during 1914, 126 occurred in individuals between 15 and 65 years old—that is, at a *wage-earning age*.

Deaths from Principal Epidemic Diseases.

The seven “principal Epidemic Diseases” caused 247 deaths, as follows :—

Diarrhœa and Enteritis (under two years)	105
Whooping Cough.....	57
Measles	30
Scarlet Fever	24
Diphtheria	16
“Fever” (Enteric, Typhus, and Simple Continued Fever)	15
Smallpox	0

This corresponds to a death-rate from all these diseases of 2.23 per 1,000 of the population.

Deaths from other Notifiable Infectious Diseases.

The following deaths occurred from other infectious and notifiable diseases not included above :—

Erysipelas	4
Puerperal Fever	4
Poliomyelitis	1
Ophthalmia Neonatorum	1

Comparison of South Shields Death-Rates with those of Country generally.

The following Table shows the annual death-rates in England and Wales for 1914 :—

	Death-rate per 1,000 Population.							Deaths per 1,000 Births.	
	General Death-rate.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhoea and Enteritis (under 2 years).	Infant Mortality Rate.
England and Wales	14.0	0.05	0.00	0.24	0.08	0.21	0.15	20.4	105
97 Great Towns, including London	14.7	0.04	0.00	0.35	0.09	0.25	0.16	26.1	114
145 Smaller Towns	12.9	0.05	0.00	0.21	0.07	0.18	0.16	19.8	104
England and Wales, less the 242 Towns	13.4	0.05	0.00	0.12	0.06	0.17	0.14	12.6	93
London	14.4	0.03	..	0.31	0.07	0.20	0.16	27.6	104
Durham Administrative County	14.9	0.11	..	0.17	0.22	0.36	0.23	36.1	134
South Shields	17.7	0.14	..	0.27	0.22	0.52	0.14	29.9	137

NOTIFIABLE ACUTE INFECTIOUS DISEASES.**(A) GENERAL STATISTICS.****Number Notified.**

Under the Infectious Disease (Notification) Act, 1889, which was brought into force within the Borough in May, 1891, the Public Health (Cerebro-Spinal Fever and Acute Poliomyelitis) Regulations, 1912, and the Public Health (Ophthalmia Neonatorum) Regulations, 1914, 1,254 notifications were received during 1914. The nature of these diseases, and the corresponding figures for the past 10 years, are shown in the following Table :—

Disease.	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Scarlet Fever	227	217	325	292	494	231	160	273	1108	1023
Diphtheria and Mem- branous Croup	103	168	133	128	93	82	71	62	61	72
Erysipelas.....	117	104	64	97	89	72	72	65	80	70
Enteric Fever	84	54	48	39	30	27	33	18	22	65
Smallpox	100	1	..	..	..	11	2	1	1	..
*Chickenpox	327	..	..	..	..	..	..	..	..	..
Puerperal Fever	4	1	5	5	4	8	7	3	5	4
‡Ophthalmia Neona- torum .....	..	..	..	..	..	..	..	..	..	19
†Poliomyelitis Anterior Acuta .....	..	..	..	..	..	..	..	3	3	1
†Cerebro-Spinal Fever Continued and Relaps- ing Fevers .....	..	..	..	..	..	..	..	1	..	..
Typhus .....	..	..	..	..	..	..	..	..	..	..
Plague .....	..	..	..	..	..	..	..	..	..	..
Cholera .....	..	..	..	..	..	..	..	..	..	..
Totals	962	545	575	561	710	431	345	426	1280	1254

*This disease was made notifiable during the prevalence of Smallpox as a precautionary measure, but ceased to be notifiable in August, 1905.

†These diseases were made notifiable in March, 1912.

‡This disease was made notifiable April, 1914.

Seasonable Incidence.

The following Table shows the number of cases of Acute Infectious Diseases notified during 1914, and the months in which the notifications were received :—

1914.	Scarlet Fever.	Diphtheria.	Erysipelas.	Enteric Fever.	Smallpox.	Puerperal Fever.	Continued and Relaps'g Fevers	Ophthalmia Neonatorum.	Poliomyelitis.	Cerebro-Spinal Fever.	Typhus.	Plague.	Cholera.	Totals.
January ..	156	9	5	4	..	1	..	..	1	..	..	..	..	176
February ..	112	6	6	2	..	..	..	..	..	..	..	..	..	126
March	124	10	2	3	..	..	..	..	..	..	..	..	..	139
April	81	7	9	3	..	1	..	3	..	..	..	..	..	104
May	78	6	6	6	..	..	..	..	..	..	..	..	..	96
June	59	..	10	2	..	..	..	3	..	..	..	..	..	74
July	76	5	5	2	..	1	..	2	..	..	..	..	..	91
August	80	5	5	1	..	..	..	1	..	..	..	..	..	92
September	70	5	5	7	..	..	..	4	..	..	..	..	..	91
October ..	83	9	6	14	..	..	..	4	..	..	..	..	..	116
November..	53	1	4	10	..	..	..	..	..	..	..	..	..	68
December	51	9	7	11	..	1	..	2	..	..	..	..	..	81
Totals ..	1023	72	70	65	..	4	..	19	1	..	..	..	..	1254

Age-Incidence, and Locality.

For these particulars in connection with the Notifiable Acute Infectious Diseases, see Table 8, page 145.

(B) DISEASES IN DETAIL.

Scarlet Fever.

This disease, which for a considerable period had shown a comparatively low degree of prevalence in the Borough, assumed epidemic proportions during 1913; and throughout 1914 the incidence of the disease continued high. The outbreak reached its height in November, 1913, during which month 243 cases were notified. During 1914 there was a fairly steady decline in the number of cases notified month by month—the figures for the twelve months being 156, 112, 124, 81, 78, 59, 76, 80, 70, 83, 53, 51, respectively. The total for the year (1,023) was only slightly below the total for 1913 (1,108); the earlier months of 1913 having been comparatively free from the disease. The *attack-rate* was 9.2 per 1,000 of the population, as compared with 10.0 per 1,000 in 1913.

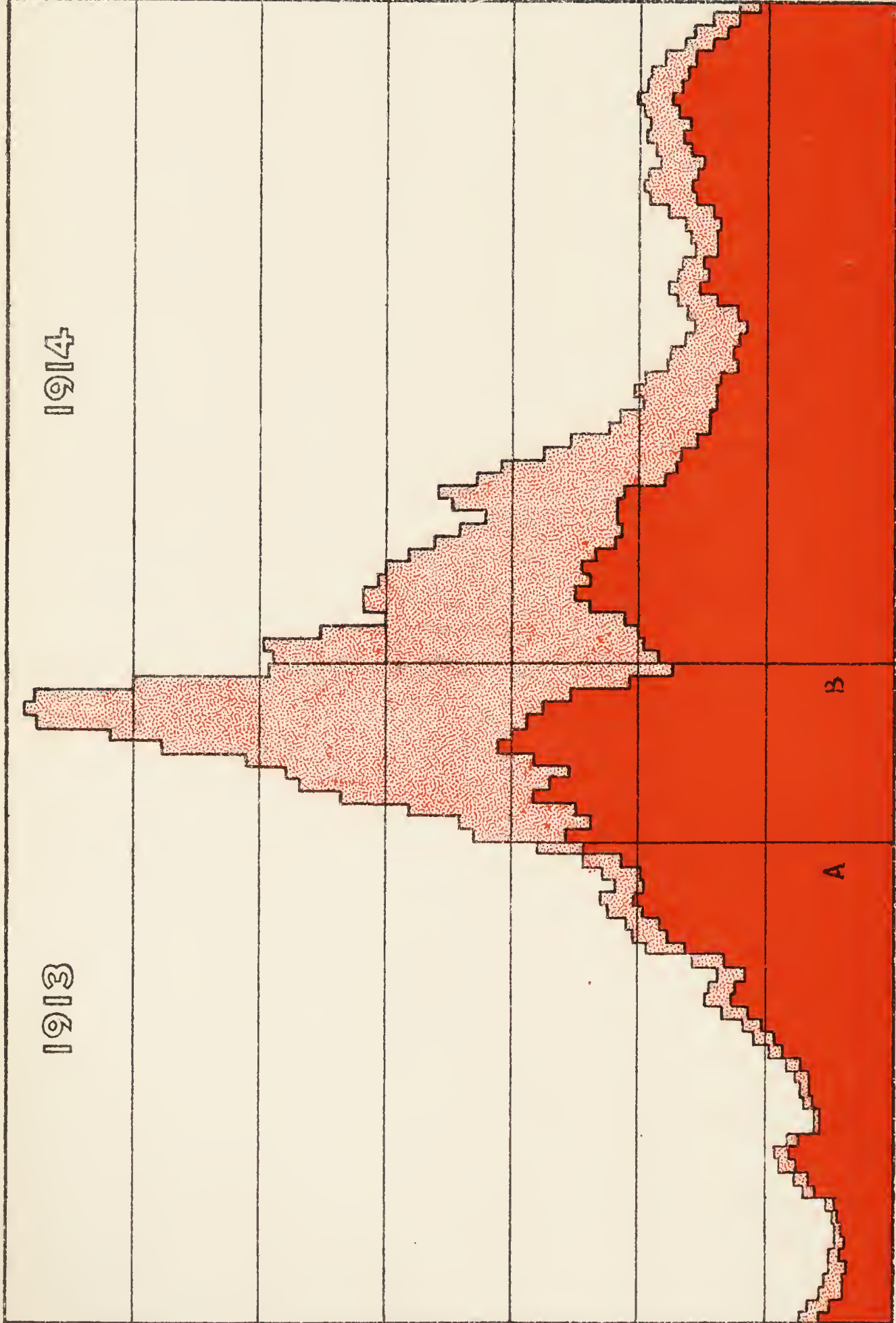
The highest number of cases under treatment in the Borough on any one day was 262 (on January 11th), as compared with 359, the highest for 1913 (December 2nd).

The following Table shows the incidence of Scarlet Fever in South Shields during the past fourteen years :—

Nº OF CASES IN BOROUGH. 350 300 250 200 150 100 50 0

1913

1914



JAN. FEB. MAR. APR. MAY. JUNE. JULY. AUG. SEP. OCT. NOV. DEC. JAN. FEB. MAR. APR. MAY. JUNE. JULY. AUG. SEP. OCT. NOV. DEC.

SCARLET FEVER IN SOUTH SHIELDS, 1913 AND 1914.

DARK RED=CASES UNDER TREATMENT IN THE BOROUGH HOSPITAL (AVERAGE IN EACH WEEK).
LIGHT RED=CASES UNDER TREATMENT AT HOME (AVERAGE NUMBER IN EACH WEEK).

LINE MARKED A=10TH SEPT., 1913. UP TO THIS DATE ALL CASES SUITABLE FOR HOSPITAL TREATMENT (86% OF THE TOTAL NOTIFIED) WERE ADMITTED TO, AND TREATED IN, THE BOROUGH HOSPITAL.
LINE MARKED B=END OF 1913. BETWEEN 19TH SEPT. AND THE END OF THE YEAR 1913, ONLY 39% OF THE TOTAL NOTIFIED CASES COULD BE ADMITTED TO HOSPITAL, OWING TO ACCOMMODATION BEING FULLY TAXED.

	Cases of Scarlet Fever.
1901	1,263
1902	834
1903	378
1904	278
1905	227
1906	217
1907	325
1908	292
1909	494
1910	231
1911	160
1912	273
1913	1,108
1914	1,023

Type of cases and method of spread.—As obtained during 1913, the cases during the past year were for the most part very mild in character. Almost a necessary consequence of the occurrence of this mild form of the disease is that many cases go unrecognised either entirely or for several weeks after the onset of the disease ; with the result that the spread of infection is facilitated. And unfortunately the infection conveyed by mild cases does not necessarily produce a mild attack in the person infected ; it is well-known that a severe form of the disease may be contracted from a patient who himself exhibits only the most trifling symptoms.

Mortality.—Of the 1,023 cases, 24 died from the disease. Of these, 14 were home-treated cases. The *mortality-rates* were as follows :—

	Mortality Rate per cent.
All cases	2.3
Cases treated in Deans Hospital	1.4
Cases treated at home	4.9

The *death-rate* per 1,000 of the population was 0.22.

Hospital Accommodation.—The chart printed opposite this page shows graphically the average number of cases of Scarlet Fever in the Borough during each week of the past two years (1913 and 1914) and the proportion of these treated in the Borough Isolation Hospital.

Up to September 19th, 1913, it was possible to remove to hospital all cases of the disease except where objection was raised by the parents, or where sufficient means of isolation were available in the patients' homes. From the beginning of the year to this date 86 *per cent.* of the cases notified were taken to hospital for treatment. The existing hospital accommodation had been

augmented by the erection of a specially designed hospital marquee—a step decided on in July. This marquee has been of the greatest service from the point of view both of administration and treatment; no complication or unsatisfactory result of any kind has arisen from its use. It is necessarily, however, merely a temporary expedient.

On September 19th, 1913, owing to the accommodation of the hospital being fully taxed, it became necessary to select cases for admission; those whose home isolation was least adequate being given the preference. From September 19th, 1913, to the end of that year the proportion of cases removed to hospital was *40 per cent.*

This unavoidable change in procedure was coincident with a rapid increase in the prevalence of the disease; the increase is clearly shown on the chart.

During 1914, *70 per cent.* of the cases of Scarlet Fever notified were removed to hospital.

Rates for past years.—The following Table gives the Scarlet Fever Attack-, Death-, and Mortality-Rates, together with the percentage of cases removed to the hospital since compulsory notification came into force:—

Year.	Population.	Attack-rate per 1,000 Population.	Death-rate per 1,000 Population.	Mortality Rate per cent. of Cases.	Percentage of cases Removed to Hospital.
1892	80,350	4.8	.12	2.5	34
1893	82,284	7.4	.38	5.2	27
1894	84,077	8.4	.39	4.6	28
1895	85,910	4.4	.18	4.1	33
1896	87,785	5.4	.18	3.3	40
1897	89,699	7.1	.15	2.2	40
1898	91,656	6.9	.25	3.6	42
1899	93,657	7.1	.21	3.0	42
1900	95,703	5.3	.21	4.1	55
1901	97,800	12.5	.60	4.7	39
1902*	101,801	8.2	.38	4.7	49
1903	102,561	3.7	.12	3.2	73
1904	103,327	2.7	.08	2.9	75
1905	104,099	2.2	.06	2.6	70
1906	104,876	2.1	.06	2.8	67
1907	105,659	3.1	.09	2.8	68
1908	106,448	2.7	.08	3.1	75
1909	107,244	4.6	.18	3.8	67
1910	108,045	2.1	.06	2.6	69
1911	108,844	1.5	.01	0.6	72
1912	109,678	2.5	.05	2.2	79
1913	110,513	10.0	.28	2.8	58
1914	110,604	9.2	.22	2.3	70

*Borough extended.

Diphtheria (including Membranous Croup).

The *number of cases* of Diphtheria notified was 72.

The *attack-rate* was 0.65 per 1,000 of the population. This compares favourably with the corresponding rate for the Administrative County of Durham—1.70 ; for the eighty County Boroughs—1.56 ; and for all England and Wales—1.61.

The *number of deaths* from the disease was 17 (one of which was “outwardly transferable.”)

The *mortality-rate* (per cent. of cases) was 24 : a very high percentage.

The *death-rate* from Diphtheria was 0.14 per 1,000 of the population.

A diminution in the mortality rate could reasonably be expected if hospital accommodation for the disease were provided.

No *hospital accommodation* is provided for cases of Diphtheria. The need for the provision of such accommodation has been urged in previous annual reports. The home conditions of patients are in many cases such as to allow of neither adequate nursing for the patient nor efficient isolation in the interests of the other members of the household or of the general public. Most fortunately, the type of Diphtheria prevailing has been of comparatively low infectivity. But for this the Borough could hardly escape for long a serious outbreak of the disease.

The *home accommodation* in connection with the cases notified during 1914 can be gathered from the following :—

One-roomed houses : 1 primary case occurred in a one-roomed house, the number of inmates being 4 (2 adults, 2 children under 15 years of age).

Two-roomed houses : 19 primary cases occurred in two-roomed houses, the average number of inmates being 4 (2 adults, 2 children). Six of these cases died.

Three-roomed houses : 14 primary cases occurred in three-roomed houses, the average number of inmates being 6 (3 adults, 3 children). Three secondary cases developed, and six deaths occurred.

Four-roomed houses : 17 primary cases occurred in four-roomed houses, the average number of inmates being 6 (3 adults, 3 children). One secondary case developed, and three deaths occurred (one in 1915).

Five rooms and over : 17 primary cases occurred in such houses, the average number of inmates being 7 (5 adults, 2 children). Three deaths occurred, one of which was primarily due to Measles.

Shops were attached to three of the houses (4, 8 and 8 rooms respectively).

Supply of Antitoxin.—As in previous years in accordance with the Diphtheria Antitoxin (outside London) Order, 1910, a

stock of Diphtheria antitoxin has been kept at the Medical Officers' Department for the use chiefly of private medical practitioners. Where the patient's circumstances are such that payment cannot be made the antitoxin is given free; in other cases the cost price is charged.

During the past year 148,000 units were used, as follows :—

For 27 necessitous cases :—

40 ampoules of 2,000 units each..... 80,000 units.

5 ,, 4,000 ,, 20,000 ,,

For 5 other cases :—

8 ampoules of 2,000 units each..... 16,000 units.

5 ,, 4,000 ,, 20,000 ,,

For one doubtful case in Deans Hospital :—

3 ampoules of 4,000 units each 12,000 units.

Comprehensive information regarding the results of the treatment in the above cases is not available. Five of the cases for which antitoxin was supplied died.

Enteric Fever.

The number of cases *notified as* Enteric Fever during the year in South Shields was 65.

Of the 65 persons so notified, 46 were *admitted to hospital*; the remaining 19 being treated at home. Of the 46 admitted to hospital, 19 were found *not to be suffering from Enteric Fever*; the ultimate diagnoses in these cases being :—

Tuberculosis	5
Pneumonia	3
Constipation	3
Bronchitis	2
Diarrhœa	2
Ovarian Tumour	1
Pneumonia and Empyema	1
Bright's Disease	1
Hepatic Cirrhosis and Fatty Degeneration of the Heart	1

Of the 27 true cases of enteric fever treated in hospital, 9 died, corresponding to a case-mortality of 33.3 per cent. Of the 19 cases which were not sent to hospital (whether all these proved to be actually cases of enteric cannot be stated), 8 died; corresponding to a case mortality of 42 per cent. (In two of the latter cases death was certified as being due to Pneumonia and Acute Bright's Disease respectively). The *death-rate* from Enteric for the year was 0.14 per 1,000 of the population.

In the remaining portion of this report on enteric fever those cases which, though notified as enteric, proved subsequently not to be cases of the disease are omitted; the *total number of true cases* for the year being taken as 46.

The *attack-rate* per 1,000 of the population was 0.41.

The *seasonal distribution*, as regards the dates on which notifications were received, is shown below :—

January	3
February	2
March .....	..
April	3
May	5
June	2
July	1
August	1
September	6
October	12
November	8
December	3
	<hr/> 46

Thus, the heaviest incidence occurred during September, October, and November ; during these three months 26 out of the 46 cases were notified, or over 56 per cent. of the year's total.

There were, during the year, three *secondary cases*—all three instances of the occurrence of a case of enteric fever in a house being followed by the occurrence of a second case in the same house. These three secondary cases were :—

1. Female (M.W.) age-5, notified in May.
2. Female (B.O.) age-55, notified in October.
3. Male (G.W.) age-17, notified in December.

The *age- and sex-distribution* of the year's cases was as follows :—

Age.	Males.	Females.
0—5	1	..
5— .....	..	2
10—	3	2
15—	5	1
20—	4	3
25—	5	2
30—	6	1
35—	2	..
40—	4	..
45—	2	..
50—	2	..
55— .....	..	1
	<hr/> 34	<hr/> 12

The noteworthy feature of these figures is that 34 of the 46 cases occurred in males—a percentage of 74, or roughly three-

quarters. If the three "secondary" cases are omitted (two of these being females) the percentage is 77.

If the sex-incidence and seasonal incidence are stated together, the following result is obtained (the three secondary cases are omitted) :—

	<i>Males.</i>	<i>Females.</i>	
January .....	..	3	
February	2	..	
March .....	..	..
April	2	1	
May	3	1	
June	2	..	
July	1	..	
August	1	..	
September	4	2	} 4
October	10	1	
November	7	1	
December	1	1	
	<u>33</u>	<u>10</u>	

From this statement it will be seen that during September, October, and November, the three months during which there was a marked increase in the number of cases of enteric notified, 21 out of 25 primary cases, or 84 per cent., were males.

When the ages of the 21 males who were notified during this period are considered, they are found to be as follows :—

September—18, 18, 29, 34 years.

October—21, 22, 29, 30, 31, 33, 40, 43, 45, 48 years.

November—14, 18, 23, 29, 31, 36, 36 years.

Thus, with the exception of one patient, aged 14, none of the males affected were children ; and all with this exception belonged to the active "working" period of life.

The *Ward-incidence* of the cases was as follows :—

WARD.	No. of Cases during 1914.			No. of Cases, Sept.—Nov.		
	Male.	Female.	Total.	Male.	Female.	Total.
Shields	5	..	5	5	..	5
Beacon	2	..	2	2	..	2
St. Hilda	1	1	2	..	..	..
Hadrian	2	1	3	1	..	1
Holborn .....	..	..	..	..	..	..
Laygate	3	..	3	1	..	1
Victoria.....	4	1	5	2	..	2
Bents.....	2	1	3	2	..	2
Rekendyke	1	2	3	1	2	3
Westoe	4	2	6	1	1	2
Deans	2	3	5	1	1	2
Tyne Dock	2	..	2	..	..	..
Simonside	3	1	4	2	1	3
West Park	3	..	3	3	..	3
Total	34	12	46	21	5	26

The cases were, therefore, not confined to any particular Ward or group of Wards, but were scattered fairly equally throughout the town ; both as regards the period of the whole year and as regards the period of heavy incidence, September—November.

The *occupations* of the persons attacked is shown below :—

Males :—

Coal Miners (Hewers, Shifters, etc.)	5
Quarryman	1
Coal Trimmers.....	3
Rivetters (all different works)	4
Labourers (Docks, 2 ; Gas Works, 1 ; Fish Canning Works, 1—a secondary case).....	4
Seamen	2
Cartmen	2
Mineral Guard (Harton Coal Co.)	1
Foyboatman	1
Barman	1
Painter	1
Bricklayer	1
Joiner.....	1
Instrument Repairer, G.P.O.	1
Teacher	1
Architect	1
Children : Scholars.....	3
No occupation	1

Females :—

Housewives, etc., including 1 secondary case	5
Shopkeeper and Shop Assistants	3
Children : Scholars	2
No occupation, including 1 secondary case	2

Considering the distribution of occupations among the inhabitants of the Borough, there is no evidence in this Table that any particular trade or industry was specially attacked.

The *sanitary conveniences* in the 43 dwellings affected were, in 31 instances, privy receptacles ; in 10 instances, w.c.'s (2 "Fowlers") ; in 2 instances, both privy and w.c.

Presumptive evidence of *imported infection* was present in three cases, all males, notified in May, July, and September, and aged 50, 26, and 18 years respectively. These three cases had almost certainly all been infected outside the Borough.

In investigating the *method of spread* in an outbreak of enteric fever (the *cause* in all cases being the typhoid bacillus or an allied form) the distribution of the cases as regards age, sex, locality, occupation, etc., may throw more light on the problem than any definite evidence extracted from the patients as to a specific source of infection. There are several reasons for this. The interval between the date of the infection of a patient and the date on which primary symptoms appear is, in enteric, relatively long—7 to 21 days. Again, the symptoms during the first week or two weeks are not infrequently vague, and may be slight, so that medical help may not be obtained, and the nature of the disease may not be suspected or recognised until perhaps four or five weeks after the date of infection. By this time a patient's memory as to possible sources of infection such as drinking bad water, contact with other cases of illness, etc., is apt to be a fallacious guide ; and also there is considerable probability, if the disease has progressed, of his mental condition being dulled, and of his strength being so lowered that any detailed interrogation is both inadvisable and likely to be fruitless.

It will be seen from the facts already examined that the main features of the South Shields enteric incidence during 1914, were :—

A comparatively low attack-rate early in the year, followed by an acute exacerbation during the months of September, October, and November (much in excess of any mere "autumn rise" such as frequently occurs with this disease) ; the infection showing a quite unusually heavy bias towards males, and selecting almost entirely adults aged 18-45 (an uncommon distribution : the great majority of patients in an average run of cases being between 10 and 25 years old).

A recognition of these features led to the presumption that a vehicle of infection was present which had access more readily to the adult male population, and which certainly was not gaining equally free access to all sections of the community. Also, that while this was not necessarily the only infecting agent, it was in all likelihood the cause of a large proportion—probably the majority—of the primary cases.

As to the nature of this particular agent, certain possibilities were practically excluded. For example, any gross pollution of such an impartial carrier of infection as the water supply would have produced general effects. A milk-borne infection was equally unlikely (apart from the fact that no evidence existed of the consumers of any particular supply being attacked) as this would have selected children chiefly, and females rather than males. Carriage by flies, or in dust blown by the wind—common general causes—both failed to explain the particular circumstances.

Of more likely possibilities, such as the existence of a “carrier” case—an infected barman, for example, handling tumblers, glasses, etc., would have explained the concentration among adult males—no evidence was obtainable.

Among articles of diet, shellfish early attracted suspicion as a possible source. These doubtful delicacies, gathered as they often are from the mouths of rivers where contamination is easy, must always be regarded as potentially dangerous, unless the beds from which they are taken are under the most rigid scientific supervision. Locally (and possibly the fact is a general one) the consumption of shellfish such as mussels, shrimps, etc., is much greater among men than among women. At mussel-stalls at least three out of four customers are men (the reputation of the mussel as a “pick-me-up” after a lengthy sederunt in the tavern is firmly established); and it is known that these particular shellfish are not popular with children.

Evidence obtained from enquiry into the history of cases, though incomplete, was, considering the difficulty of obtaining accurate information, strongly suggestive. Looking back, it is found that in 10 instances there was a history of shellfish having been eaten; 9 of these cases were males, and 8 of these males were notified during the September—November period.

Enquiries were made into the source of the shellfish which were being retailed in the town; and eventually conclusive evidence was obtained that certain beds, from which mussels were being taken and sent to South Shields and the neighbouring district, were exposed to contamination not only from sewage, but from sewage infected with enteric.

Steps were immediately taken to stop the importation of mussels from this source. The following circular letter was sent to the various retailers of shellfish in the Borough :—

DEAR SIR (MADAM),

MUSSELS AND ENTERIC FEVER.

I have definite information to the effect that the mussel beds at ——— are exposed to contamination of infectious disease.

I must, therefore, warn you against obtaining or retailing shellfish from this area.

Yours faithfully,

D. MORLEY MATHIESON,

Medical Officer of Health.

The local press willingly helped in warning the public as to the dangers involved. The military authorities were communicated with and the desirability of putting shellfish shops and stalls “out of bounds” was indicated.

The stoppage of the sale of the mussels in question was effected about the middle of October. It was hoped that some diminution in the notification of cases of the disease would be observed during the latter part of November (allowing one to three weeks for incubation, and a further week or two for the development of symptoms).

A diminution did occur during this period. As has been stated, eight cases were notified during November; five of these were notified during the first week, two during the second week, and one on November 29th. In six of the eight cases the onset of the disease had occurred during October, in one on November 1st, in the last on November 11th. During December, three cases were notified; one was a “secondary” case (probably infected by the primary case which had occurred in the same house); in the other two symptoms were first noticed on November 21st and November 27th respectively.

(NOTE: The notifications received during the early months of 1915 were as follows :—January 3, February 0, March 2, April 0).

It may be noted in conclusion that no case of enteric fever occurred during the year among the troops stationed in the Borough.

Smallpox.

There were no cases of Smallpox notified during the year; and no “suspects” were admitted to hospital for observation.

One death (that of a child) occurred during the year from Chickenpox. As this disease is seldom fatal, the possibility of Smallpox was kept in view and the case investigated. No suspicious circumstances, however, were discovered.

Lists of contacts were received from the Port Medical Officers at
London,
Southampton,
Leith, and
Tyne Port.

The lists referred in all to 15 men. These men had been, while on board ship, in contact with cases of Smallpox ; and (with two exceptions) subsequently came to South Shields. They were kept under observation by the Medical Officer and staff until the possibility of their developing the disease had passed.

The two exceptions were Naval Reserve men, who did not return to South Shields, but proceeded straight to the Naval Barracks at Portsmouth ; the medical authorities at which port were communicated with. These men had been in contact with Smallpox on the "Arlanza." It is interesting to note that on her way home to this country the "Arlanza" was stopped by the German armed merchantman "Kaiser Wilhelm der Grosse" (then commerce-raiding) a few days before the Smallpox patient was landed at Lisbon. The "Arlanza" was allowed to proceed—probably on account of her undesirable passenger—and after touching at Lisbon reached port in this country on August 19th. The "Kaiser Wilhelm der Grosse" was sunk off the West Coast of Africa on August 27th by H.M.S. "Highflyer."

Erysipelas.

The *number of cases* notified was 70.

Four *deaths* occurred from the disease.

Puerperal Fever.

The *number of cases* notified was 4.

Four *deaths* occurred. Three of these cases had been previously notified, one had not.

The four notified cases, three of which proved fatal, occurred in the practice of midwives.

Cerebro-Spinal Fever.

No case of Cerebro-Spinal Fever (epidemic Cerebro-Spinal Meningitis) was notified during the year. One *death* was certified as due to "Cerebro-Spinal Meningitis," but this case had not been notified, nor was the nature of the infection stated on the death certificate.

In view of the possibility of cases of epidemic meningitis being, in some instances, overlooked, owing to the difficulty that exists at times in distinguishing this disease clinically from other forms of meningitis, the following record of the ward-distribution of deaths certified as having been due to such other forms of meningitis is worthy of consideration :—

WARD.	Deaths certified from Tuberculous Meningitis.	Deaths certified from Meningitis (nature undefined).	Total.
Beacon	6	7	13
Hadrian	4	1	5
Rekendyke	3	2	5
Deans	1	3	4
Westoe	1	2	3
Laygate	1	1	2
Tyne Dock	2	..	2
Shields	2	..	2
St. Hilda .....	..	1	1
Holborn .....	..	1	1
Victoria.....	..	1	1
Simonside .....	..	1	1
West Park	1	..	1
Bents.....	..	..	..
Total	21	20	41

It will be noted that there was a marked concentration of these cases in the Beacon neighbourhood. Fifteen of the above deaths occurred in the district bounded by Mile End Road, Ocean Road, and the sea- and river-fronts.

Poliomyelitis Anterior Acuta.

Of this disease (which is the cause of “infantile paralysis”) one case, which proved fatal, was notified in January : a girl aged 7.

Ophthalmia Neonatorum.

This infectious disease (inflammation of the eyes of the newly-born) was made compulsorily notifiable by the “Public Health (Ophthalmia Neonatorum) Regulations, 1914,” as from 1st April, 1914.

The disease is commonest during the first month of life, when the conjunctiva of the eye is very susceptible to infection and has not yet developed its characteristic high degree of resisting power.

The condition may arise from a variety of causes ; but by far the commonest of these is Gonorrhœa, which gives rise to 65 per cent. of all cases. Its great significance lies in the fact that it is one of the chief causes of preventable blindness. Over 33 per

cent. of the children in the blind schools of this country owe their loss of sight to Ophthalmia Neonatorum. Apart from other and more important considerations, the financial loss involved in the extra cost of educating these children, as compared with the cost of educating normal children, is a heavy annual charge on the rates and on the exchequer funds.

The cases notified each month, from April onwards, numbered 3, 0, 3, 2, 1, 4, 4, 0, 2; a total of 19. These were notified as follows :

By midwives only	10
By medical practitioners only	6
By both midwives and medical practitioners	3

One case died three months after notification; the cause of death being given as "Ophthalmia Neonatorum; Bronchitis, 12 days; Convulsions."

A case of delay in notification on the part of a midwife is dealt with in another section of this report (see under "Maternity and Infant Welfare").

Cholera, Plague, Typhus, and Relapsing Fever.

No cases of these diseases occurred.

No Cholera or Plague "contacts" were reported during the year.

(C) CASES TREATED IN THE ISOLATION HOSPITALS.

Isolation Hospital, Dean Road.

(a) TOTAL CASES UNDER TREATMENT DURING 1914.—The following Table shows the *total number* of cases admitted to, and discharged from, the Deans Hospital during 1914:—

Notified Diseases.	Remaining in on Dec. 31st, 1913.	Admitted during 1914.	Total Number Treated during 1914.	Discharged during 1914.	Died during 1914.	Remaining in on Dec. 31st, 1914.
Scarlet Fever	96	718	814	750	11	53
Enteric Fever	1	47	48	30	10	8
Tuberculosis .....	..	4	4	4	..	..
Suspected Scarlet Fever ....	..	1	1	1	..	..
Contacts (Scarlet Fever) ....	..	32	32	32	..	..
Totals	97	802	899	817	21	61

Included in the admissions to hospital during the year are two cases of Scarlet Fever and one case of Enteric Fever (admitted from outside the Borough) in members of H.M. forces, and a case of Scarlet Fever in a probationer nurse of the hospital staff.

(b) AVERAGE NUMBER UNDER TREATMENT DURING EACH MONTH OF 1914.—The following Table gives the *average daily number* of cases under treatment in hospital during each month of 1914 :—

Notified Diseases.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Whole Year.
Scarlet Fever	102.9	120.5	108.4	87.4	71.1	63.5	68.8	70.8	76.7	84.0	83.9	61.5	83.0
EntericFever	1.2	1.9	1.4	3.6	3.2	3.1	1.3	1.1	0.8	8.7	15.5	14.0	4.7
Other .....	..	..	..	..	..	..	0.4	1.0	2.5	9.0	0.3	..	1.1
All diseases	104.1	122.4	109.8	91.0	74.5	66.6	70.5	72.9	80.0	101.7	99.7	75.5	88.8

(c) .TOTAL CASES UNDER TREATMENT FOR PAST 10 YEARS.—The following Table shows the number of cases admitted during each of the *past ten years* to the Deans Isolation Hospital. (The Hospital was first opened for the reception of patients in May, 1883) :—

Notified Diseases.	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Scarlet Fever	161	147	220	219	333	160	115	217	645	718
Enteric Fever	59	35	37	32	21	19	24	15	8	47
Other diseases	4	5	2	3	1	2	4	5	1	37
Totals	224	187	259	254	355	181	143	237	654	802

(d) WARD DISTRIBUTION OF CASES REMOVED TO HOSPITAL.—The number of cases of infectious disease removed during the year to the Deans Hospital from the different Wards is shown in the Table on page 145.

(e) SCARLET FEVER CASES TREATED IN HOSPITAL.—The *greatest number* of Scarlet Fever cases under treatment in hospital at any one time was 129 on February 7th and 8th.

The *smallest* number of Scarlet Fever cases under treatment at any one time was 50 on December 24th to 26th.

The *average stay* in hospital of Scarlet Fever patients was 42.1 days.

There were *eleven deaths* in the hospital among Scarlet Fever patients, (after 11 hours, and 3, 5, 7, 10, 10, 11, 21, 26, 30, and 36 days respectively). Two of the deaths were due to diseases other than Scarlet Fever.

The *complications* from which certain of the Scarlet Fever patients suffered were as follows :—

	Present on Admission.	Developed after Admission.
Adenitis*	34	57
Albuminuria	2	21
Alopecia	1	..
Blepharitis	7	..
Boils on head	2	..
Bronchial Catarrh.....	2	..
Bronchitis	8	4
Burns	2	..
Conjunctivitis	3	..
Eczema	12	..
Epistaxis .....	..	1
Favus	1	..
Hæmaturia	1	2
Herpes	4	1
Impetigo	3	..
Laryngitis	1	3
Macular rash	4	2
Mitral disease	1	..
Œdema of eyelids	7	9
Otitis Media	1	..
Otorrhœa, double	6	11
„ single	23	36
Pharyngitis .....	..	1
Pleurisy	1	..
Pneumonia, double	4	3
„ Bronchial	3	..
Psoriasis	1	..
Rheumatism	5	17
Rhinitis .....	..	4
Rhinorrhœa	31	14
Ringworm of head.....	3	2
Scabies	1	..
Scalds	2	..
Still's disease.....	1	..
Strabismus, internal.....	11	..
Tonsillitis	7	1
Tendo Achillis, contracted	1	..
Torticollis	1	..
Tuberculosis	10	..
Uræmic Convulsions.....	..	2
Urticaria	2	3
Total.....	209	194

*13 of these cases were operated on.

From this Table it will be seen that many cases were suffering, on admission to hospital, from skin diseases and other conditions necessitating special precautions and treatment. The most prevalent true “ complications ” of Scarlet Fever were Adenitis (enlarged glands), 91 cases ; Otorrhœa (discharge from the ears), 76 cases ; Rhinorrhœa and Rhinitis, 49 cases ; Albuminuria, 23 cases ; Rheumatism, 22 cases.

Secondary Infections among Scarlet Fever Patients.

Of the 814 Scarlet Fever patients treated in hospital during the year, 18 suffered concurrently from other acute infectious diseases. These cases of “secondary infection” are shown in the following Table :—

	Secondary Infections			
	Present on Admission.	Developed after Admission.	Contracted in Hospital.	Total
Measles	5	5	2	12
Whooping Cough	1	..	..	1
Chickenpox	3	2	..	5

An explanation of this classification of secondary infections is necessary. Those “*present on admission*” were cases showing symptoms of the second disease at the time of their admission to hospital. These patients were not put in the general Scarlet Fever wards, but in “isolation” wards.

Those “*developed after admission*” were cases which had been infected with the second disease before their admission to hospital, but which *developed* symptoms of the disease only after admission. In most instances there was no means of knowing that a patient had thus been exposed to a secondary infection prior to admission ; and when symptoms developed the patient was already in one of the general wards.

Those “*contracted in hospital*” were cases actually infected after admission. As I have indicated in previous reports, there is at present considerable difficulty in controlling outbreaks of secondary infections at the Deans Hospital owing to the limited accommodation. It is, therefore, remarkably satisfactory to be able to report at the end of a year in which 814 Scarlet Fever patients were treated in the institution that in only two instances was a secondary infection contracted by patients. Without adequate facilities for separate isolation—that is, isolation of cases suffering from *two* infectious diseases concurrently, or cases suffering from one infectious disease but recently exposed to (and possibly about to develop) a second—a very heavy strain is thrown upon the staff. The value of separation or cubicle wards in this connection is referred to later. (p. 45).

Cases found on admission not to be suffering from Scarlet Fever.

92 patients were found on admission to have no symptoms of Scarlet Fever. Of these—

69 were discharged, after being under observation in hospital for periods varying from 2 to 4 weeks, and having shown no signs of Scarlet Fever or other acute infectious disease ;

14 developed Scarlet Fever, symptoms appearing at periods varying from 7 to 23 days after admission ;

5 were diagnosed as Measles, isolated, and did not develop Scarlet Fever ;

1 was diagnosed as Diphtheria and died on the day of admission;

3 were diagnosed as suffering from Tuberculosis.

“ *Secondary Scarlet Fever.*”

Two patients admitted with symptoms of Scarlet Fever developed a secondary attack after 5 and 7 days in hospital respectively. Both cases desquamated after each attack.

(f) ENTERIC FEVER CASES TREATED IN HOSPITAL.—The *greatest number* of cases, which had been sent in as suffering from Enteric Fever, under treatment in hospital at any one time was 18 (on several days during November and December).

During 30 days of the year there were *no patients* in hospital suffering from Enteric Fever.

Ten deaths occurred among the Enteric Fever cases, after 3, 3, 3, 6, 9, 12, 16, 28, 34, and 55 days respectively. One of the deaths occurred in the case of a patient who, though sent in as “ Enteric Fever ” was found not to be suffering from that disease ; the cause of death being Hepatic Cirrhosis and Fatty Degeneration of the Heart.

The number of cases sent in as Enteric and found subsequently not to be suffering from that disease was 19. The diseases from which these patients were suffering have already been stated. (See p. 12).

The *complications* from which the patients suffered were as follows :—

	Present on Admission.	Developed after Admission.
Bronchiectasis	1	..
Bronchitis .....	..	3
Congestion of lungs .....	..	1
Delirium Tremens.....	2	..
Hæmorrhage (bowel) .....	..	12
Headache (severe).....	..	1
Meningitis .....	..	1
Paralysis .....	..	1
Perforation (bowel) .....	..	2
Perineal Abscess .....	..	1
Punctate rash (abdomen) .....	..	1
Rheumatism .....	..	1
Tuberculosis (acute) .....	..	1
Tympanites	1	..

(g) OTHER CASES IN HOSPITAL.—The other cases admitted to hospital during the year were—

- 4 cases of Tuberculosis.
- 1 case of suspected Scarlet Fever.
- 32 “ contacts ” of Scarlet Fever admitted for quarantine.

Smallpox Hospital, Whiteleas.

(a) CONSTITUENT AUTHORITIES.—The constituent authorities of the North-East Durham Joint Smallpox Hospital Board are :—

- The County Boroughs of Sunderland and South Shields;
- The Urban Districts of Felling, Hebburn, Jarrow, and Southwick ;

The Rural Districts of South Shields and Sunderland.

Sunderland County Borough was taken in as a constituent authority during 1914, application having been made to the Local Government Board for an enlarged Order.

(b) CASES UNDER TREATMENT DURING 1914.—No cases of Smallpox were treated at the Hospital during the year.

(c) TOTAL CASES UNDER TREATMENT IN LAST 22 YEARS.—The following is the number of cases treated in the Hospital since it was opened in 1893 :—

YEAR.	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903
Cases of Smallpox	51	14	22	12	3	9	3	2	..	71	37
YEAR.	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Cases of Smallpox	103	101	2	..	..	1	15	2	1	1	..

(D) NEW HOSPITAL ACCOMMODATION FOR ACUTE INFECTIOUS DISEASES.

The inadequacy of the existing arrangements at the Deans Hospital for the isolation and treatment of cases of acute infectious disease, and the progress made during the past year towards the provision of adequate accommodation for the Borough, are dealt with in a later section of this report. (See p. 42).

CERTAIN NON-NOTIFIABLE DISEASES.

Measles.

The *deaths* from this disease during 1914 numbered 30. The *death-rate* was 0.27 per 1,000 of the population.

Fourteen of the deaths occurred during the first quarter of the year, 11 in the second quarter, 5 in the third quarter, and none in the fourth quarter.

Twenty-eight of the deaths occurred in children under 5 years of age ; and 2 were at the age of 5-6 years.

The number given above refers only to deaths directly attributed to Measles. Without doubt many of the deaths among children certified as due to Bronchitis and Pneumonia were *indirectly* due to Measles or Whooping Cough.

The whole of the Classes in two Infants' Schools (Baring Street and Gilbert Street) were closed in March for periods of three weeks on account of Measles.

Whooping Cough.

The *deaths* from Whooping Cough numbered 57 ; 55 were children under five years of age.

The *death-rate* from the disease was 0.52 per 1,000 of the population.

No schools were closed during the year on account of this disease.

Diarrhoea and Enteritis.

The *deaths* from these diseases in children under two years of age numbered 105.

The *death-rate* from these diseases was 0.95 per 1,000 of the population, or 30 per 1,000 births.

The *age-distribution* of the children under one year old who died from these diseases was as follows :—

- 2 were under one month ;
- 23 were one to three months old ;
- 26 were three to six months old ;
- 21 were six to nine months old ;
- 8 were nine to twelve months old.

The *Ward distribution* of the disease is shown in Table 2, page 139, and in Table 7, page 144.

This disease is referred to later under “ Maternity and Infant Welfare,” (pages 73 and 84).

Pneumonia.

Pneumonia was responsible for 185 deaths, equal to a *death-rate of 1.67 per 1,000 of the population*—as compared with 145 deaths in 1913.

97 were cases of Broncho-Pneumonia, 33 of Lobar Pneumonia ; 55 were not defined.

The *seasonal incidence* was as follows :—

1st	quarter	.....	84	deaths.
2nd	„	.....	40	„
3rd	„	.....	21	„
4th	„	.....	40	„
			185	

The *age-distribution* of the deaths is shown below :—

42	deaths occurred	under 1 year of age ;
57	„	between 1 and 5 years ;
17	„	between 5 and 20 years ;
17	„	between 20 and 35 years ;
15	„	between 35 and 45 years ;
14	„	between 45 and 55 years ;
23	„	over 55 years old.

Of the 97 deaths from Broncho-pneumonia, 84 occurred in children under 5 years of age, and 8 in children between 5 and 10 years old.

Bronchitis.

The *deaths* from Bronchitis during the year numbered 165, equivalent to a *death-rate of 1.49 per 1,000 of the population*.

The *seasonal incidence* was as follows :—

1st	quarter	.....	70	deaths.
2nd	„	.....	44	„
3rd	„	.....	19	„
4th	„	.....	32	„
			165	

The *age-distribution* of the deaths from Bronchitis was :—

Under 1 year	.....	64	deaths.
1—5 years	.....	27	„
Over 55 years	.....	58	„
Other ages	.....	16	„
		<hr/> 165	

Influenza.

There were 23 deaths from Influenza, equivalent to a *death-rate of 0.21 per 1,000 of the population*.

Cancer.

The total number of *deaths* certified as due to Cancer was 93 ; equivalent to a death-rate of 0.84 per 1,000 of the population.

The *age-distribution* of the deaths was as follows :—

Under 20 years	..
20—25	2
25—	1
35—	21
45—	23
55—	25
65—	18
75—	3

The *sex-distribution and localisation* of the disease are shown in the subjoined Table :—

Parts affected.	Males.	Females.	Total.
Stomach, liver, etc.....	20	11	31
Intestines, rectum, & peritoneum..	8	6	14
Female genital organs.....	..	23	23
Buccal cavity	4	..	4
Breast .....	..	9	9
Skin	1	..	1
Other parts or unclassified.....	8	3	11
Totals	41	52	93

TUBERCULOSIS.

Of all infectious diseases, Tuberculosis casts the largest and darkest shadow over the fortunes of the community. Year after year a vast harvest of lives is gathered; the majority of those afflicted succumb at an age when their energies should be at the highest level and their usefulness greatest. It is an insidious and tedious disease; most often death is only the final act in a long tragedy of suffering and disablement, with inevitable poverty and wretchedness where a family's breadwinner, as so often is the case, is the chosen victim.

The *primary or essential cause* of the disease is direct infection with the tubercle bacillus; and against this infection adequate and comprehensive measures must be directed. But steps must also be taken against the *secondary or assisting causes*—and these are all the influences which tend to depress and vitiate the resisting powers of the people—neglect of cleanliness, aversion to fresh or clean air and sunlight, bad housing conditions, insufficient or unsuitable food, worry, work under unhealthy or unsuitable conditions. The problem is sociological as well as epidemiological.

In the following paragraphs some account is given of the activities of Tuberculosis in South Shields, and of the measures so far taken by the local authority to secure treatment for cases of the disease, and to combat its spread. In considering statistics the chronic nature of the disease should constantly be kept in mind; thus, for example, it must not be forgotten that the majority of those whose deaths are recorded in any year contracted the disease several years earlier.

(A) DEATHS FROM TUBERCULOSIS.

Deaths from all forms of Tuberculosis.

There were 209 deaths from Tuberculosis during 1914, as follows:—

Pulmonary Tuberculosis	145
Other forms of Tuberculosis	64

This corresponds to a death-rate from the disease of 1.89 per 1,000 of the population:

Death-rate from Pulmonary Tuberculosis	1.31
Death-rate from other forms of Tuberculosis	0.58
Total	<u>1.89</u>

as compared with a death-rate of 1.99 in 1913.

The total deaths in the past five years are shown below :—

	1910	1911	1912	1913	1914
Pulmonary Tuberculosis	135	130	168	149	145
Other Tuberculosis	76	63	43	74	64
Total	211	193	211	223	209

Disinfection after Phthisis Deaths.

During the year effort was made to secure that disinfection was carried out in as many cases as possible after deaths from Phthisis.

The result has been that in connection with 76 per cent. of the instances where deaths had occurred from Pulmonary Tuberculosis the rooms which had been occupied by the patients were disinfected by the staff of my Department (as compared with 57 per cent. in 1913, 56 per cent. in 1912, and 20 per cent. in 1911), and in 72 per cent. bedding was removed to the Isolation Hospital and disinfected (as compared with 59 per cent. in 1913, 53 per cent. in 1912, and 42 per cent. in 1911).

Many of the deaths where no home disinfection is recorded as having been carried out occurred in the Harton Hospital and other institutions.

In addition, 14 disinfections were carried out after the removal of a patient from one house to another, or to hospital.

(B) NOTIFICATION OF TUBERCULOSIS.

The *compulsory notification of all cases* of Pulmonary Tuberculosis came into force on the 1st January, 1912 ; and of all cases of Non-pulmonary Tuberculosis, on 1st February, 1913.

The *total number of notifications* received during the year was 687. These related to 487 new cases—that is, in respect of a number of cases more than one notification was received.

These 687 notifications referred to—

- 384 cases seen in private practice ;
- 107 ,, poor law practice ;
- 102 ,, tuberculosis clinics ;
- 79 ,, approved sanatoria ;
- 11 ,, general hospitals ;
- 4 ,, school medical inspection.

The 487 new cases notified were distributed as follows :—

Pulmonary Tuberculosis	354
Non-pulmonary Tuberculosis	133
	<u>487</u>

Cases not notified.—In addition to cases in respect of which notifications were received, information was obtained from the death returns regarding 36 cases which had not been notified. (In 1913 there were 40 similar cases). Of these, 16 were pulmonary cases, and 20 non-pulmonary.

Adding these to the notified cases, the number of new cases regarding which information was obtained during the year was—

Pulmonary Tuberculosis	370
Non-pulmonary Tuberculosis	153
	<u>523</u>

Of the 36 cases regarding which no notification was received, 4 were South Shields residents whose deaths had occurred in other towns, 2 were uncertified deaths, 1 was certified by the Coroner, and in 3 cases death had occurred in institutions. The remaining 26 were cases occurring in the private or poor law practice of South Shields medical practitioners.

A circular letter was sent out by me to all practitioners in the town on 12th June, 1914, pointing out—

(a) That the Tuberculosis Regulations, 1912, require that every case of Tuberculosis, whether pulmonary or non-pulmonary, be notified within 48 hours of recognition.

(b) That with regard to 40 of the deaths which occurred in South Shields from Tuberculosis during 1913, and 20 similar cases up-to-date in 1914, no notification had been received from the practitioner who attended.

(c) That all the information supplied in notifications (including the name, etc., of the parent) is treated as confidential.

(d) That if the medical attendant, when notifying a case, states that he is of opinion that adequate precautions are being taken to prevent the spread of infection, and that he for some reason particularly desires that the usual steps should not be taken to investigate home conditions, I shall give instructions to that effect.

I have no doubt that in the great majority of these non-notified cases notification has been inadvertently omitted by the practitioner in attendance. It is, however, necessary to emphasize the fact that the Tuberculosis Regulations impose a statutory obligation and

provide for a penalty ; and that great harm may conceivably be done by neglect of their observance.

Comparative incidence.—The following Table gives comparative information regarding the number of cases of Tuberculosis notified during 1914 in London, England, Wales, and South Shields, stated per 100,000 of the population. The rate for South Shields is accurate, no duplicate notification being included ; the other rates are in excess of the actual rate, as they “include a considerable number of duplicate notifications . . . the number of such duplicate notifications is particularly large in London.” (Annual Report on Incidence of Notifiable Infectious Diseases, 1914, Medical Officer, Local Government Board).

	Notification of Tuberculosis, 1914. Rates per 100,000 Population.	
	Pulmonary.	Non-pulmonary.
London	364	85
England (excluding London)	199	65
Wales	192	43
South Shields.....	318	119

(C) LOCALISATION OF THE DISEASE IN NOTIFIED CASES.

The localisation of the tuberculous lesion in the 487 cases notified during the year is shown in the following Table :—

Lungs	354
Peritoneum, Intestines, etc.	39
Glands (other than mesenteric)	32
Brain, Meninges	19
Spinal Column.....	7
Joints:—Hip, 8 ; Knee, 1.....	9
Lupus	7
Disseminated	11
Other (including cases where situation not specifically defined, <i>e.g.</i> , “ Leg, ” ? Lupus).....	9
	<hr/> 487 <hr/>

(D) THE EXTENT OF THE DISEASE IN THE BOROUGH.

On January 1st, 1914, there were on the register in my department the names of 726 persons suffering from Tuberculosis : 583 being pulmonary, and 143 non-pulmonary cases.

During 1914, 487 new cases were notified ; so that the total number of cases under observation during the year was 1,213 : 937 pulmonary and 276 non-pulmonary cases.

After deducting the number of deaths among notified cases, the number of removals to other towns, etc., there remained on the register on 31st December, 1914, the names of 1,031 patients who were on that date inhabitants of South Shields and were suffering from Tuberculosis :—

Pulmonary Tuberculosis	802
Non-pulmonary Tuberculosis	229
Total	<u>1,031</u>

(E) THE MUNICIPAL TUBERCULOSIS CLINIC.

As a development of work which, of necessity on a very limited scale, had been carried out at the Municipal Buildings since December, 1911, the Tuberculosis Clinic was established on 1st November, 1913. On that date Dr. Lyons took up his duties as Assistant Medical Officer in charge of the therapeutic work of the clinic, and temporary accommodation was set aside in my department. These temporary premises, which were occupied throughout 1914 (the new permanent premises not being available by the end of the year) became increasingly inadequate as the number of patients attending for examination or treatment grew.

The following statement contains in condensed form some account of the work carried out at the clinic during 1914. It has been prepared from a report written by Dr. Lyons, with whose work during the period it deals. (A note in statistical form of the work of the clinic during the last two months of 1913—that is, from the establishment of the clinic on November 1st to the end of the year—is given in the Appendix).

Examination of New Cases.

During the year, 467 patients were *examined* at the clinic.

Of these, in 63 no evidence of Tuberculosis was discovered. The remaining 404 were found to be *suffering from Tuberculosis* in one form or another.

Of the 467 patients examined, 388 were examined as primary patients, and 79 as “ *contacts* ”—that is, these 79 were persons who were known to have been in contact with cases of the disease, and to have been exposed to the risk of infection.

Of the 79 contacts, 33 were found to be suffering from Tuberculosis.

The following Table analyses the above cases with reference to age and sex, and shows the number who were insured persons.

		Adults.		Under 16 years.		Total.
		Men.	Women.	Boys.	Girls.	
Total Cases examined.	Insured	125	73	..	..	198
	Not Insured	10	49	112	98	269
	Total	135	122	112	98	467
Cases found to be Tuberculous.	Insured	122	69	..	..	191
	Not Insured	9	47	84	73	213
	Total	131	116	84	73	404
Cases examined as Contacts.	Tuberculous	2	6	13	12	33
	Non-Tuberculous	3	9	16	18	46

Of the 467 examinations made during the year, 59 were of the nature of *consultations* with medical practitioners in the Borough. In 51 of the cases so examined there was definite evidence of uncomplicated tuberculous disease. Two others were cases of Tuberculosis complicated with malignant growth ; and in one case Tuberculosis and obscure Cerebral Disease were co-existent. In five the diagnosis of Tuberculosis could not be established.

The number of *insured applicants for sanatorium benefit* examined during the year was 143. (This number is included in the total of 467 persons examined, given above).

In accordance with the recommendation of Memo. No. 112 I.C. the South Shields Insurance Committee decided for the present to confine sanatorium benefit to insured persons ; the Committee has powers, however, at any time to extend the benefit to dependents of insured persons, or to any class of dependents.

The following Table shows the months in which these applications were made :—

January	2
February	12
March	8
April	6
May	10
June	16
July	14
August	12
September	14
October	22
November	15
December	12

The number of applications received from insured persons in 1912 (October—December) was 16; in 1913, 98; in 1914, as stated above, 143.

Applications are made in the first instance to the Clerk to the Insurance Committee. The applicant is then referred to the Tuberculosis Clinic, where an examination is made with a view to deciding whether the applicant is suffering from Tuberculosis, and, if so, what form of Sanatorium Benefit (Domiciliary treatment; treatment at the Clinic; or treatment in Sanatorium) is desirable. When this has been decided by the Tuberculosis Officer a recommendation is sent to the Insurance Committee.

In the *diagnosis* of Tuberculosis attention was directed to the examination of the patient for physical signs; this, along with the consideration of the symptoms and examination of the sputum formed the basis of diagnosis in all the pulmonary cases. In some cases recourse was had to the application of the intradermal cutaneous reaction with T.F.*

Treatment at the Clinic: nature of treatment, and numbers attending.

Nature of treatment given.—The treatment given at the Clinic may be classified as educational, specific, symptomatic, and general. Under *educational* treatment may be grouped instruction as to personal and general hygiene, importance of fresh air, cleanliness, care of sputum, etc. *Specific* treatment consisted in the inoculation of patients with gradually increasing doses of Tuberculin. The Tuberculin used in most cases was Proteose-free Tuberculin (T.F.)* and was prepared in the Municipal Laboratory. In some cases, especially those of tuberculous glands, bones, and joints, Koch's Bacillary Emulsion was employed. Reactionless methods were employed in every case.

Symptomatic treatment consisted of the administration of drugs for the relief of symptoms—*e.g.*, cough, night sweats, etc. *General* treatment included the prescribing of extract of malt, and malt and cod liver oil; in a number of cases “extra nourishment” in the form of eggs, milk, and beef was given to insured persons.

In some cases specific treatment alone was given; in many a combination of this with the other forms of treatment.

Courses of treatment lasted, on the average, five months.

Number of patients treated during 1914.—On January 1st, 1914, there were 30 patients (all pulmonary cases), under treatment.

* (*Lancet*, Dec. 7th, 1912, and *British Medical Journal*, Nov. 22, 1913, W. C. Lyons.)

During the year 276 new patients were taken on for treatment.

The total number of cases under treatment during 1914 was therefore 306.

Of these, 23 died, and 169 were discharged during the year ; leaving 114 under treatment at the Clinic on December 31st.

The cases under treatment during the year are classified below according to age and sex, the number of insured and non-insured being shown :—

		Adults.		Under 16 years.		Total.
		Men.	Women.	Boys.	Girls.	
Insured	Pulmonary	16 + <i>95</i>	3 + <i>36</i>	..	..	150
	Other	<i>3</i>	<i>1</i>	..	..	4
Not Insured	Pulmonary	<i>3</i>	<i>5 + 27</i>	<i>3 + 36</i>	<i>3 + 52</i>	129
	Other	<i>2</i>	<i>4</i>	<i>8</i>	<i>9</i>	23
Total ..		119	76	47	64	306

NOTE.—The figures in *italics* represent new patients taken on during the year.

Treatment at the Clinic : results.

Terms used in classifying stages of disease.—For the purposes of this report, the patients under treatment at the Clinic have been divided into three groups, according to the *stage* of the disease. This classification is a slight modification of that adopted by the International Tuberculosis Committee, and based upon the “Turban-Gerhardt” method. It is purely arbitrary, and although far from being perfect, seems to be probably the most satisfactory method yet devised. It is as follows :—

Group I.—Disease of *slight severity*, limited to *small areas* ; for instance, an infection of both apices, which does not extend below the spine of the scapula and the clavicle ; or an infection of one apex, not extending below the second rib. (Patients with early and limited disease in the upper and lower lobes of the same lung—a fairly common lesion—are classified in this group).

Group II.—Disease of *slight severity*, more extensive than I., but affecting at most, the volume of *one lobe* ; or *severe* disease extending at most to the volume of one half lobe.

Group III.—All cases extending beyond II., and all cases with considerable cavities.

By disease of *slight severity* is to be understood : disseminated foci manifested by slight dullness, unclear or weak vesicular, vesico-bronchial, or broncho-vesicular breathing, and fine and medium crepitations. By *severe* disease : compact infiltration, recognised by great dullness, very weak (indeterminate) broncho-vesicular or bronchial indefinite breathing, with (usually) râles. Considerable cavities (to be recognised by tympanitic percussion-note, deep bronchial or amphoric breathing, and extensive coarse consonating râles) come under Group III.

Pleuritic involvement, if less than two inches in any direction, is left out of account ; if more than two inches it is classified under Group III.

The case as a whole is *classified according to the more diseased side*.

(This classification, while differentiating between slight and severe *local* disease does not convey any idea of the *general* condition of the patient as regards the effects produced by the absorption of toxins of the Tubercle Bacillus. Investigations are being made on this subject, and it is hoped that a scheme will soon be formed which will bring this important factor into line with the others).

Terms used in classifying amount of improvement.—The following terms are used to describe the condition of the patient on the conclusion of a course of treatment at the Clinic :—

“ *Disease arrested*.”—General health restored, and lung disease completely arrested ; there being no physical signs present, or only such as are compatible with a completely healed lesion.

“ *Improved*.”—General health, though improved, not completely restored. Physical signs, though less marked than on commencing treatment, still present. Patient fit to follow a light occupation.

“ *Not Improved*.”—Cases which have remained stationary, or where there has been deterioration of general or of local condition, or of both.

Condition of patients discharged during 1914.—During the year 23 patients died, and 169 were discharged from the Clinic. Of the latter, 6 were discharged for non-attendance. The other 163 patients were recorded on discharge as follows :—

Disease arrested	61
Improved	81
Not improved	21

The following Tables contain a detailed analysis of the results of treatment ; and show the cases classified according to the severity and extent of the disease, age, sex, and insurance.

INSURED.	MEN.			WOMEN.			TOTAL.
Class	I.	II.	III.	I.	II.	III.	
Disease arrested ..	17	11	..	6	1	..	35
Improved	17	15	6	2	3	1	44
Not improved .....	..	3	4	1	1	3	12
Died .....	..	1	11	..	..	6	18
Total	34	30	21	9	5	10	109

plus 3 men and 1 woman discharged for non-attendance=113.

NOT INSURED.	MEN.			WOMEN.			UNDER 16.						Total.
							Boys.			Girls.			
	Class	I.	II.	III.	I.	II.	III.	I.	II.	III.	I.	II.	
Disease arrested	1	..	..	2	..	..	11	3	..	8	1	..	26
Improved .....	..	..	..	3	2	1	12	4	..	6	6	3	37
Not improved ..	..	..	1	..	1	6	..	..	..	..	..	1	9
Died .....	..	..	2	..	..	3	..	..	..	..	..	..	5
Total	1	..	3	5	3	10	23	7	..	14	7	4	77

plus 1 boy and 1 girl discharged for non-attendance=79.

It is too early yet to form an opinion as to whether the improvement seen in those patients in whom the disease was arrested will last ; but the majority of those discharged as “disease arrested,” and “improved ” have returned to their old occupations. New employment was, however, found for some. Eighteen of the patients were sufficiently recovered to be accepted for the Army. One of these was subsequently discharged on account of a recrudescence of the disease.

On discharge from the Clinic each patient is instructed as to how he can help maintain the improvement, and as to the employment most suitable for him. Patients are asked to come once a month for examination, and encouraged to report if there are any signs of a relapse. Many of them attend regularly, but others forget, although if sent for they come readily enough.

Cases under treatment at end of 1914.—At the end of 1914, 114 patients remained under treatment at the Clinic ; these were as follows :—

		Adults.		Children under 16		Total.
		Men.	Women	Boys.	Girls.	
Insured ..	Pulmonary	24	15	..	..	3
	Other.....	2	..	..	..	2
Not Insured	Pulmonary	1	18	13	33	65
	Other.....	..	..	3	5	8
Total		27	33	16	38	114

(F) CASES TREATED IN SANATORIA.

The South Shields Insurance Committee sent 29 insured patients suffering from Tuberculosis to Stanhope and Wolsingham Sanatoria during 1914. All these cases were examined at the Tuberculosis Clinic prior to being sent to sanatoria.

On January 1st, 1914, there were 5 South Shields insured patients (all males) in sanatoria. During the year 26 men and 2 women were admitted, 1 man died, and 25 men and 1 woman were discharged ; leaving under treatment in sanatoria at the end of the year 5 men and 1 woman.

The condition of the 26 patients discharged from sanatoria, at the time of their return to South Shields, is shown below :—

Class	MEN.			WOMEN.			Total.
	I.	II.	III.	I.	II.	III.	
Disease arrested ..	6	3	..	..	..	..	9
Improved	5	2	4	..	..	1	12
Not improved .....	..	1	4	..	..	..	5
Total	11	6	8	..	..	1	26

(G) HOME VISITING BY HEALTH NURSES.

During 1914, 728 visits were paid to patients in their homes by the Health Nurses on the staff of the department. During the year some changes were made with regard to the nursing arrangements ; but the equivalent of one whole-time nurse for Tuberculosis work

was available practically throughout the year. The nurse's work, however, included attendance at the Clinic, which accounted for considerably more than half of the time available.

Of the visits paid to patients in their homes, approximately 40 per cent. were first visits, and 60 per cent. re-visits. The importance of repeated visits to the homes of patients suffering from Tuberculosis is great; especially in the case of bedfast patients, where fortnightly and even weekly visits should be paid.

HOSPITAL AND SANATORIUM ACCOMMODATION FOR INFECTIOUS DISEASES IN THE BOROUGH.

Inadequacy of Existing Accommodation.

To the question of the inadequacy and unsuitability of the existing accommodation provided by the Local Authority for cases of infectious disease I have referred frequently in previous reports. The main features of the existing conditions are :—

(1) The absence of hospital accommodation of any kind for cases of Diphtheria.

(2) The insufficiency of existing accommodation for cases of Scarlet Fever—the total accommodation amounting, on the accepted standard of cubic space, to beds for 36 patients.

(3) The unsuitability and insufficiency of the existing accommodation for cases of Enteric Fever—an old temporary building with space for at most 13 patients.

(4) The absence of satisfactory accommodation for the isolation of cross-infections.

(5) The absence of hospital or sanatorium accommodation of any kind for cases of Tuberculosis.

(6) The inconvenience of the administrative buildings in view of the increased needs of the Borough.

(7) The impossibility of providing additional permanent accommodation on the site of the present hospital.

The Deans Hospital was built more than thirty years ago, when the population of the Borough was little more than half what it now is, and when the rapid development of the past twenty-five years could not be foreseen. At that time the site was on open ground, removed from houses : now a densely-populated industrial district impinges on its boundaries.

Nature of requirements for acute and chronic infectious disease.

Insufficient hospital accommodation for acute infections does not only mean inconvenience to patients, nursing and medical staff. It cannot be overlooked that, firstly, concentration of infection in an overtaxed ward very frequently leads to the development of more serious forms of the disease concerned ; and, secondly, that the more the hospital accommodation which is available falls short of what is required, the more administrative efforts to control an outbreak are embarrassed.

Calculation of the amount of accommodation required for any area for cases of acute infectious disease must be based on the population and circumstances of that area. It cannot be based merely on the *average* number of patients treated in hospital over

a long period. The standard to be taken is the possible accommodation which one may reasonably expect will be necessary in the event of an outbreak of one disease, or in the event of outbreaks of two or more diseases occurring simultaneously.

Hospital provision for acute infectious disease is a form of insurance against a possible contingency. When the provision is not adequately made, the community is not adequately insured. When accommodation commensurate with the needs of an area has been provided, the fact that all the available beds are at any given time not required is, to the Sanitary Authority of that area, a matter for congratulation and not regret.

The functions of hospital and sanatorium provision for the most deadly of all *chronic* infectious diseases—Tuberculosis—are, roughly, two-fold (1) the treatment with a view to cure or improvement of early cases and the palliative treatment of later or advanced cases ; (2) the isolation of patients and the prevention of the spread of infection.

Between the administrative measures for the treatment and prevention of acute and those for chronic infectious disease, there are distinctions but no essential differences. When an occasion arises for considering *de novo* the provision of hospital accommodation in an area both for acute infections and also for Tuberculosis, I am strongly of opinion that then the opportunity should be seized of combining the provision in one institution.

Requirements for South Shields.

Keeping in view the above considerations, when instructed by the Health Committee to report on the requirements of the Borough as regards the hospital treatment of acute infections and Tuberculosis, I prepared in outline a scheme in which the accommodation necessary for the Borough under both heads was united under one administration.

On the basis of population, and of the known incidence of the different infections within the Borough, the number of beds required for cases of acute infectious disease was set at 124 ; and for Tuberculosis, 66, this latter number not including the provision of light shelters in which accommodation for 10 more patients might be required. The total beds would therefore be 200.

The distribution of this suggested accommodation for patients may be briefly indicated :—

(1) Four main pavilions for acute infectious disease (two for Scarlet Fever, one for Diphtheria, one for Enteric Fever), each pavilion having two main wards (12 beds each ward), two side rooms (1 bed each), two sun rooms (1 bed each)—a total of 28 beds in each pavilion. Additional items were a play-room over the centre of

each pavilion ; a verandah on the south-western aspect of each pavilion (the orientation of the pavilions to be N.W. and S.E.) ; and, associated with the Diphtheria pavilion, an operating theatre for cases requiring tracheotomy, etc..

(2) One cubicle pavilion for mixed infections, etc., with 12 single-bed compartments.

(3) One nursing Tuberculosis pavilion, with 16 beds for males (3 one-bed units, 4 two-bed units, and 1 five-bed unit) and 12 for females (3 one-bed units, 2 two-bed units, and 1 five-bed unit).

(4) One convalescent Tuberculosis pavilion for males, with 16 beds (2 two-bed units, and 2 six-bed units).

(5) One convalescent Tuberculosis pavilion for females with 12 beds (2 single-bed units, and 2 five-bed units).

(6) One convalescent Tuberculosis pavilion for children, with 10 beds (2 five-bed units).

The type of buildings most suitable and economical were also reported on ; the value of verandahs under ordinary circumstances and at times of extra strain ; the type of accommodation required for the administrative block, kitchen premises, laundry, discharge block, pathological rooms, etc. ; the number of nursing and domestic staff ; etc.

Visit of Deputation to Hospitals in other areas.

In January, 1914, a deputation consisting of six members of the Health Committee, the Borough Engineer, and the Medical Officer of Health visited certain hospitals in other areas : these hospitals having been selected on account of individual features which each presented. The deputation subsequently reported to the Health Committee as follows :—

(1) “ We have to report that we visited the following hospitals on the dates stated :—

Royal Victoria Hospital and Dispensary	
for Consumption, Edinburgh.....	Jan. 8th, 1914
City Fever Hospital, Edinburgh	Jan. 9th, „
Public Health Hospital, Leith	Jan. 10th, „
City Hospitals, Nottingham	Jan. 21st, „
City Hospitals, Sheffield	Jan. 22nd, „
City Hospitals, Liverpool	Jan. 23rd, „

(2) The arrangements made by the various Corporations and their officials were such as to provide facilities for a most thorough inspection of the hospitals, and we desire to put on record our appreciation of the courtesy and consideration which were uniformly extended to us as representatives of your Committee.

(3) The points to which our attention was specially directed were as follows :—

(a) General—Situation and extent of site, nature of

boundary wall, diseases treated, number of beds provided, general arrangement of pavilions, corridors connecting pavilions and administrative buildings, means of conveyance of patients, cost of construction, staffing, heating system, hot water supply, laying out of grounds, lighting, internal telephone system, sewage disposal.

(b) Ordinary pavilions—One- or two-storey buildings, verandahs, walls, floors, height of wards, cubic space per bed, windows, ventilation, bath-rooms, w.c. rooms, day-rooms for convalescent patients, side wards, duty rooms, operating rooms, fittings.

(c) Special pavilions, etc.—Cubicle pavilions, accommodation for Tuberculosis (wards for advanced cases, open-air wards, shelters, administration, classification of different stages of disease, etc.)

(d) Other buildings—Administrative block and nurses' home (quarters for nurses, sisters, maids, matron, and resident medical officer, kitchen premises, committee room, lecture room, dispensary, instrument room, general dining-room). Lodge, waiting-room for patients' friends, laundry, boiler house, disinfector, destructor, garage, discharge blocks, mortuary, post-mortem room.

(4) In the present general report it would not be expedient to deal with all these points seriatim. Their discussion may conveniently be postponed until your Committee (at a later stage in its deliberation) has the details for a scheme actually under consideration.

(5) We should like, however, to direct your attention to the following, with which we were especially impressed :—

(a) The advisability of providing in the administrative buildings ample *sleeping accommodation* for nursing and domestic staff, with allowances for future developments. In many instances the mistake has been made of stinting this accommodation in the original buildings, with the result that costly additions and alterations have subsequently been necessitated. It is now a general custom to provide a separate bedroom for each nurse.

(b) The opportunity that is afforded of effecting much saving in capital cost by avoiding expensive enclosed *corridors* between the wards and administrative blocks ; say by substituting for these open corridors of simple construction.

(c) The advantage of providing at least one pavilion on the *cubicle* principle, with a view to rapid isolation of cross-infections and doubtful and special cases. At Sheffield, where such a pavilion was built some years ago, it was stated that diminished risk of secondary infections spreading in the hospital,

increased facilities for treatment, and increased economy in administration charges, had resulted from its introduction.

(d) The advisability of providing open *verandahs* on the southern side of the main pavilions. These not only provide for the routine open-air treatment of cases, the advantage of which was demonstrated to us at Nottingham, but also are valuable as providing elasticity of space at times when, owing to an outbreak of exceptional extent, special stress is thrown upon the accommodation of the hospital.

(e) The possibility of erecting cheap and efficient accommodation for early cases of *Tuberculosis*. The new buildings at the Edinburgh City Hospital may be taken as types in this respect."

Site for New Hospital.

Ground at Cleadon was secured, in 1907, for prospective use as a site for a new isolation hospital for the Borough. This site has a good situation, being afforded considerable protection from the North and East by rising ground, and having a gradual fall towards the South and West. The subsoil is sand and gravel on clay; the extent of the site being 15 acres.

In view of the increased requirements of the Borough, it appeared to the Health Committee desirable to extend the site by the purchase of adjoining land. A recommendation to this effect was made to the Council; and negotiations for the acquisition of a further area of nearly 13 acres (bringing the total up to 28 acres) were concluded in August, 1914.

Preparation of Full Scheme.

In accordance with instructions from the Health Committee to the Borough Engineer and the Medical Officer of Health, the preparation of a full scheme embodying the requirements outlined in a preceding paragraph was proceeded with. The Borough Engineer and the Medical Officer had opportunities of discussing many details at the Local Government Board with the Board's officials; and from time to time during the year various aspects of the scheme were discussed by the Hospitals Sub-Committee and Health Committee.

MUNICIPAL LABORATORY.**(A) EXAMINATIONS.**

The nature and number of the examinations, etc., made at the Municipal Laboratory during 1914 is shown in the following Table :—

<i>Examinations.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Serum for Widal reaction—			
(a) B. Typhosus	21	53	74
(b) B. Paratyphosus	20	43	63
Blood : Corpuscles .....	..	..	9
Hæmoglobin .....	..	..	4
Cerebro-Spinal fluid for organisms and cells.....	..	..	2
Swabs for Diphtheria bacilli	13	72	85
For Tubercle bacilli—			
(a) of sputum	90	155	245
(b) of pus	1	3	4
(c) of urine .....	..	3	3
(d) of lungs and udder of cow	1	..	1
Hair for Ringworm	4	15	19
For pathogenic organisms of—			
(a) Fæces .....	..	..	2
(b) Vaginal discharge.....	..	..	7
(c) Ear discharge .....	..	..	7
(d) Nasal discharge.....	..	..	4
Urine for—			
(a) Casts .....	..	..	1
(b) Albumin and sugar .....	..	..	8
(c) Diazo benzol reaction	14	16	30
Sputum for pneumococci	1	..	1
Mussels for B. Typhosus.....	..	1	1
			<u>570</u>

All the clinical examinations recorded in the above Table were carried out free of charge. A scale of charges was approved by the Council during the year for use in connection with patients who could afford to pay.

(B) PREPARATION OF TUBERCULIN.

The bulk of the tuberculin used at the Tuberculosis Clinic during the year was made in the Municipal Laboratory, from tubercle bacilli grown from the sputum of South Shields patients.

In this way a local strain was obtained. The form of tuberculin mostly employed was T.F.—first described by Dr. Lyons (*Lancet*, 7-12-12)—from which irritant substances have been removed by precipitation with alcohol.

Tuberculin was also made for and supplied to medical practitioners in the Borough.

(C) PREPARATION OF MEDIA.

Practically all the culture media used during 1914 was prepared in the Laboratory. The solid media included nutrient agar, glycerine agar, blood serum, Dorset's medium, gelatine, potato, taurocholate lactose agar. The liquid media included veal broth, nutrient beef broth, peptone water, sugar broths (glucose, laevulose, dextrose, lactose, mannite, inulin, salicin, raffinose, cane sugar).

METEOROLOGICAL OBSERVATIONS.

On July 1st, 1914, the Meteorological Station was transferred a distance of about 800 yards S.E. from the position in the North Marine Park to the Bents Park : latitude, $55^{\circ} 0' \text{ N.}$, longitude $1^{\circ} 25' \text{ W.}$; height of ground above Ordnance Datum, 35 feet. The removal had been rendered necessary through the gradual encroachment on the free space surrounding the instruments by buildings and other objects which were likely to vitiate the accuracy of the readings.

The new situation on the plot of ground in the Bents Park, kindly placed at disposal by the Parks Committee, is in many ways very suitable for the purpose; and there is little likelihood of any future obstruction by buildings.

The various instruments, etc., are enclosed in a piece of ground 30 feet by 20 feet by "unclimbable" metal railings, six feet high, and are disposed as indicated:—

The *Rain Gauge* and *Earth Thermometers* (one foot and four feet) are situated in the centre of the plot. The top of the Rain Gauge (5 inch, Snowdon pattern) is one foot above the ground, and 36.22 feet above Ordnance Datum.

The *Dry, Wet, Maximum and Minimum Thermometers* are in a Stevenson's Screen (Meteorological pattern: double louvre), the bottom of which is about $3\frac{1}{2}$ feet above the ground. The Screen is 10 feet to the North of the Rain Gauge.

The *Anemometer* (Robinson's pattern) is $13\frac{1}{2}$ feet above the ground, in the North-East corner of the enclosure.

The *Wind Vane* (set to true North) is 14 feet above the ground, in the South-East corner.

(The *Barometer*—standard pattern: Kew principle—is kept at the Medical Officer's Department, Municipal Buildings: the cistern of the Barometer is 79 feet above O.D.)

For a period of six weeks before the station at the North Marine Park was abandoned, concurrent readings of the instruments at both Stations were made daily in order to obtain data as to any variations due to the different exposures at the respective situations. It was of course desirable to extend the comparison over a much longer period, but this was found to be impracticable.

A summary of the observations for the year will be found in Table 12, page 149.

FOOD AND WATER.

(A) FOOD SAMPLES TAKEN FOR CHEMICAL ANALYSIS.

One hundred and fifty samples were taken during the year, and submitted to the Borough Analyst. Of these, 15 were informal samples—2 of milk, 8 of butter, 2 of margarine, 2 of lard, and 1 of sweets. The following are particulars of the nature of the samples taken, of the results of the analysis, and of the action taken in certain cases :—

Milk.

- 73 samples were taken.
- 64 were “genuine” (two were of “poor quality”: a letter of caution was sent in respect of one of these samples).
- 7 were deficient in *natural fat*, as follows :—
 - Deficiency, 3.3%, 10%—Letters of caution sent.
 - Deficiency, 10%—Proceedings taken; cautioned by Magistrates.
 - Deficiency, 13.3%—No action taken; the portion forwarded to vendor was damaged in the post.
 - Deficiency, 16.6%, 26.6%—Informal samples.
 - Deficiency, 36.6%—Proceedings taken; fined 5s. and costs.
- 2 were deficient in *non-fatty solids*, as follows :—
 - Deficiency: “very slightly below the limit in non-fatty solids, but high in fat—5%.”—Letter of caution sent.
 - Deficiency: 1.6%—Letter of caution sent.

Of the 73 samples of milk, 13 were taken on delivery at the railway station: one was 13.3% deficient in milk-fat, and another was reported as “poor in fat.”

All the samples were examined for the presence of preservatives. None were found.

The average quality of the samples taken since 1911 is shown in the following Table :—

	Average Milk-fat: per cent.	Average Non-fatty Solids: per cent.
1911 : Total samples (78)	3.59	8.75
Genuine samples (61)	3.71	8.84
1912 : Total samples (74)	3.66	8.78
Genuine samples (64)	3.76	8.84
1913 : Total samples (74)	3.58	8.76
Genuine samples (67)	3.60	8.82
1914 : Total samples (73)	3.54	8.77
Genuine samples (64)	3.65	8.77

It must be remembered that the minimum of quality generally adopted as a standard (milk fat, 3%; non-fatty solids, 8.5%) represents a milk of very poor quality.

Butter.

22 samples were taken: all were "genuine." Eight of the samples were taken informally.

Cream.

Under the Public Health (Milk and Cream) Regulations, 1912, 4 samples were taken; they contained 0.41%, 0.47%, 0.48%, and 0.48% boric acid respectively.

Two of the samples were labelled "Preserved Cream," and declared to contain under 0.5% of boric acid. The other two samples were not so labelled: letters of caution were sent.

Dr. Dunn, in reporting on these samples, makes the following comments:—

"Before the 'Regulations,' the recommendation of the Preservatives Committee of 1901, that not more than 0.25% should be allowed, although not having the force of law, was generally adopted by magistrates, and it was rare to find a cream containing more.

Then Dr. Hamill reported to the Local Government Board, not on the medical question, but simply with relation to the keeping qualities of the cream, that it would probably satisfy the trade if from May to October the limit were raised to 0.4%, but kept at 0.25% for the rest of the year.

The 'Regulations' specified no limit; and the trade have not only made their own limit but are practically working up to it; for I find that nearly every sample I have now contains very nearly 0.5%, or double what it used to contain. This seems to me to be an undesirable thing; for I fear that the trade may next think that if 0.5% is necessary even in winter, more will be needed in summer, and so on. A specification of a definite limit by the Local Government Board seems to me to be desirable."

Margarine.

8 samples were taken.

7 contained boric acid, as follows:—

Proportion: 0.15% (informal), 0.15%, 0.25%, 0.32%,
0.35%, 0.60% (informal)—No action taken.

Proportion: 0.58%—Letter of caution sent.

Whiskey.

6 samples were taken: all were "genuine."

Rum.

6 samples were taken: all were "genuine."

Mustard.

5 samples were taken : 4 were “genuine.” 1 contained 10% arrowroot starch—letter of caution sent.

Baking Powder.

1 sample was taken. It contained tartaric acid : no phosphoric acid or phosphates.

Sweets.

5 samples were taken (one informal). They were free from poisonous metals and other harmful substances.

Other substances.

20 samples, all of which were “genuine,” were taken of the following substances :—Pepper, (6) ; Vinegar, (5) ; Lard, (5 ; 2 informal) ; Ground Rice, (2) ; Ground Ginger (1) ; Cornflour (1).

All the samples of Butter, Cheese, Cream, Milk, and Margarine were examined for preservatives.

(B) VISITS OF INSPECTION PAID TO PREMISES.

During the year the Inspector of Meat, etc., paid 4,319 visits to premises where the various trades under his supervision were carried on. These visits were paid as follows :—

Butchers' Shops	1,372
American Meat and Fish Shops	2,186
Fried Fish Shops.....	105
Fish-curing Places	15
Milkshops and Dairies.....	472
Cowsheds	49
Bakehouses	100
Tallow-boiling Places.....	4
Triperies	16
Gut-scraping Places	—

The number of such premises existing at the end of the year was as follows :—

Butchers' Shops	74
American Meat Shops.....	70
Pork Butchers' Shops.....	22
Fresh Fish Shops.....	21
Fried Fish Shops.....	61
Fish-curing Places	6
Milkshops and Dairies	287
Cowsheds	5
Ice-Cream Shops	(varies, 30 to 60)
Bakehouses	53
Tallow-boiling Places.....	2
Triperies	3
Gut-scraping Place.....	1

(C) PUBLIC ABATTOIR.

The Municipal Abattoir was erected in 1906. In accordance with the provisions of the South Shields Corporation Act, 1896, and the South Shields Extension Order, 1901, no persons can, except with the consent of the Corporation, slaughter in the way of trade any cattle, sheep, horse, or pig, within the Borough, except in the Public Abattoir. This has been in force since November, 1906; the Abattoir was opened in October of the same year. As there were no registered slaughterhouses in the Borough, no compensation was paid by the Corporation.

The *Site* covers an area of about one acre.

Direct Access to the Abattoir from the railway is provided by means of a private subway.

The *Lairage Building* provided for cattle, calves, and sheep is 156 feet long by 23 feet broad, and is divided into seven compartments, three of which are for sheep and four for cattle.

The *Main Slaughterhall* is 146 feet long by 27 feet broad. The Cooling Hall, *i.e.*, storage for cooling and stiffening, is 107 feet long by 20 feet broad, and will accommodate the carcasses of 500 beasts, sheep, and other animals.

Cold Storage is provided in which is installed Linde's refrigerating plant, capable of maintaining a temperature of 35 degrees Fahrenheit.

Accommodation is also provided for *Pig Slaughtering*, and there are *Cocking Halls* in connection therewith, *Tripery*, *Gut-Scraping*, *etc.*

The following Table gives the numbers of animals slaughtered in the last eight years :—

	1907	1908	1909	1910	1911	1912	1913	1914
Beasts	5,248	5,157	4,444	4,266	4,221	3,553	3,585	4,269
Calves	735	730	564	435	270	290	189	166
Pigs ..	8,146	8,320	6,465	5,675	7,019	7,525	6,358	5,302
Sheep	30,620	33,968	36,450	36,010	36,351	34,318	31,872	31,418
Total	44,749	48,175	47,923	46,386	47,861	45,686	42,004	41,155

It will be noticed that from 1907 to 1913 there was a continuous decrease in the numbers of cattle slaughtered at the Abattoir. Last year, however, there was a decided increase as compared with the two previous years, probably due to the special circumstances created by the War.

The number of carcasses condemned at the Abattoir during 1914 will be found in the next paragraph.

(D) FOOD CONDEMNED AND DESTROYED.

The following are particulars of the food condemned and destroyed during the year :—

At the Abattoir.

Beasts : 23 Carcases (Tuberculosis).
 1 Quarter (Tuberculosis).
 1 Leg and Flank (Bruises, etc.)
 Viscera of 16 Beasts (Tuberculosis, 14 ; Peritonitis,
 1 ; Pericarditis and Puerisy, 1).
 Pig : 1 Carcase (Tuberculosis).
 Sheep : 6 Carcases (Dropsy, emaciation and bruises, 5 ;
 Tuberculosis, 1).

Outside the Abattoir.

(Including food-stuffs sent for convenience to the Abattoir to
 be examined by the Food Inspector).

Tripe : 27 lbs. (frozen).
 Rabbits : 83 (frozen).
 Poultry : 11 Geese.
 4 Ducks.
 18 Chickens.
 Fish : 3½ stones.
 40 quarts Mussels.
 Fruit : 1 stone Apples.
 6 lbs. Gooseberries.
 Calves : 2 Carcases.
 Sheep : 2 legs (frozen).
 (The whole of the above-mentioned were condemned on account
 of decomposition).
 Beast : 1 Carcase (Dropsy and emaciation).
 Pig : 1 Carcase (found dead).

(E) OUTBREAKS OF FOOD POISONING.

A Memorandum was issued by the Local Government Board in September, 1911, dealing with outbreaks of illness, other than cases of the notifiable infectious diseases, which might be suspected to have been caused by the consumption of some article of food. In accordance with the suggestions in the Memorandum, the Medical Officer of Health is authorised by the Council to take such steps as he may consider necessary in any emergency that may arise.

Two deaths from ptomaine poisoning or suspected ptomaine poisoning were reported during the year, boys aged 7 and 10 years respectively ; one death occurred in January and the other in July. Beyond these cases, there were no outbreaks of food poisoning reported within the Borough.

(F) WATER SUPPLY.

A joint Committee representing the Durham County Council and the County Boroughs of Sunderland and South Shields, was appointed at the end of 1911, and made arrangements for the bacteriological examination by Professor Hutchens of water from the various reservoirs and wells, samples to be taken monthly from each of the sources of supply.

The investigations of the Committee are still being carried on.

SHOPS, FACTORIES, Etc.

(A) INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

The Sanitary Inspectors have paid 470 visits during the year. Written notices were sent out in 11 cases ; there were no prosecutions. The details are as follows :—

- 1. Factories (including Factory Laundries).
Inspections, 35 ; Notices, 2.
- 2. Workshops (including Workshop Laundries).
Inspections, 210 ; Notices, 5.
- 3. Workplaces (other than Outworkers' Premises).
Inspections, 225 ; Notices, 4.

(B) DEFECTS FOUND ON INSPECTION.

The defects found are summarised in the following Table :—

Particulars of Defect.	Number of Defects.				Number of Prosecutions.
	Found.	Remedied.	Receiving Attention.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts* :—</i>					
Want of cleanliness	5	5	..	..	..
Want of ventilation	1	1	..	..	..
Overcrowding .....	..	..	..	..	..
Want of drainage of floors	1	1	..	..	..
Sanitary accommodation—					
Insufficient	2	1	1	..	..
Unsuitable or defective	2	1	1	..	..
Not separate for sexes	1	..	1	..	..
Other defects.....	2	2	..	..	..
<i>Offences under the Factory and Workshop Act :—</i>					
Illegal occupation of underground bakehouse (s. 101).....	1	1	..	..	..
Breach of special sanitary require- ments for bakehouses (s. 97 to 100)....	4	4	..	..	..
Other offences (excluding offences relating to Outwork) .....	..	..	..	..	..
Total	19	16	3	..	..

* Including these specified in sections 2, 3, 7, and 8 of the Factory and Workshop Act as remediable under the Public Health Acts.

(C) REGISTERED WORKSHOPS.

The following 360 workshops were on the Register at the end of the year :—

Making of Wearing Apparel, etc.	158
(Dressmakers, 52 ; Tailors, 32 ; Milliners, 31 ; Boot Repairers, etc., 28 ; Laundries, 10 ; Hosiers, 5).	
Preparing of Food-Stuffs, etc.	75
(Bakehouses, 56 ; Fish Curers, 6 ; Tripe Preparers, 3 ; Salt Packers, 3 ; Pickle Works, 2 ; Beer Bottlers, 2 ; Sweets and Jam Makers, 2 ; Drysalter, 1).	
Joinery, etc.	52
(Joiners, etc., 31 ; Cabinet Makers and Upholsterers, 11 ; Cartwrights, 6 ; Picture Frame Makers, 2 ; Coopers, 2).	
Plumbers, etc.	27
(Plumbers, 12 ; Smiths, 12 ; Engineer, 1 ; Ship Repairer, 1 ; Boiler Composition Maker, 1).	
Watch Repairers, etc.	29
(Watch Repairers, etc., 10 ; Photographers, 5 ; Compass Makers, etc., 2 ; Scale Makers, etc., 3 ; Cycle Repairers, etc., 4 ; Sign Writers, etc., 2 ; Lithographer, 1 ; Printer, 1 ; Wire Worker, 1).	
Others	19
(Sadlers, 4 ; Sail Makers, 3 ; Umbrella Repairers, 2 ; Sculptors, 2 ; Plasterer, 1 ; Slater, 1 ; Candle Maker, 1 ; Firewood Maker, 1 ; Sack Maker, 1 ; Rag Stores, 3).	

(D) HOMEWORK.

The number of Outworkers in the Borough is very small.

Two employers each sent two half-yearly lists containing four names ; three employers each sent one half-yearly list (6 names). The total number of Outworkers reported was 8, all engaged in the making or altering of wearing apparel.

There were no instances of unwholesome premises (section 108) or of infected premises (sections 109, 110), and there were no prosecutions.

(E) OTHER MATTERS ARISING OUT OF WORKSHOPS INSPECTION.

The following matters call for report :—

Class.	Number.
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	2
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Act (s. 5) :—	
Notified by H.M. Inspector	12
Reports (of action taken) sent to H.M. Inspector ..	11
Other .....	..
Underground Bakehouses (s. 101) :—	
Certificates granted during the year .....	..
In use at the end of the year	1

(F) SHOPS ACTS.

Local Orders.

The following Special Orders are in force locally :—

South Shields Holiday Resort Order (1912), which exempts all shops from the obligation to close on the weekly half-holiday during the months of June, July, August, and September.

Ocean Road Exempted Area Order, Stationers, etc. (1912), which exempts, within the prescribed area, from the obligation to close on the weekly half-holiday the following retail trades, etc. :— Stationers, Picture Postcard Dealers, Fancy Goods Dealers, and Toy Dealers.

Tyne Dock Exempted Area Order, Grocers, etc. (1912), which exempts within the prescribed area from the obligation to close on the weekly half-holiday the following retail trades, etc. :—Grocers, Drapers, Barbers, Boot Dealers, and Ship Store Merchants.

Stationers Exemption Order (1914) which exempts all Stationers in the area comprising the whole of the Borough (with the exception of the Ocean Road and Tyne Dock exempted areas) from provisions of Section 4 in regard to closing for the weekly half-holiday as regards shops in which the business of stationer is carried on.

Hairdressers Weekly Half-Holiday Order (1914), whereby all shops to which this Order applies shall be closed at 1 p.m. on Wednesday.

Summary of Reports of Shops Inspector, 1914.

Number of Shops on Register as on 31st December ..	2,480
Number of Shops in which Assistants are employed ..	1,250
Number of Visits paid to Shops by Inspector	7,792
Stalls in Market Place, and Stalls and Cafes on North and South Beach were also visited.	
Interviews and Appointments	259
Complaints received and investigated	27

Supervising the delivery of 650 circulars to Shopkeepers :
 “Precautions to be observed in the exhibition
 and storage of Celluloid Articles.”

Infringements of the Shops Acts Reported—

Assistants employed about business of shop on their weekly half-holiday—Section 1(1)	27
No assistants forms exhibited—Section 1 (2)	54
Not keeping forms in order—Section 1 (2)	41
Assistants not having proper meal hours—Section 1 (3)	16
Young persons working excessive hours—Section 2 (1) ..	1
Non-observance of weekly half-holiday—Section 4 (1) ..	17
No weekly half-holiday notices exhibited—Section 4 (3) ..	30
Total	<u>186</u>

Infringements of the Employment of Children Act, 1903—

Employing errand boys under 14 years of age after 9 p.m.—Section 3 (1)	9
Street trading by boys under 11 years of age—Section 3 (2) ..	16

Infringements of the Public Health Acts Amendment Act, 1890.—

No sanitary convenience for shop assistants—Section 22 ..	14
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Cautions and Prosecutions.—All the above cases of infringement were reported to the Health Committee. The majority were “first offences.” There were two prosecutions under the Employment of Children Act, 1903, and three under the Non-observance of Weekly Half-holiday, Section 4 (3) Shops Act, 1912. In the first two cases the shopkeepers were fined 5s. and costs. The three latter prosecutions were all against the same shopkeeper. In the first case he was fined 2s. 6d. and costs, and in the other two cases costs only, in default of his failing to close his premises.

General Survey.

In reporting to me on the work of the past year, the Shops Inspector states:—“(a) Although the whole of the shopkeepers are exempt (under the South Shields Holiday Resort Order, 1912) from observing a weekly half-holiday during June, July, August, and September, I notice that only 19 tradesmen are taking advantage of this exemption.

With regard to the Hairdressers’ Weekly Half-Holiday Order, whereby all shops to which this Order applies shall be closed at 1 p.m. on Wednesday, I find only one availing himself of the four months exemption under the 1912 Order.

By the small numbers in each case it will be seen how readily the tradesmen of the Borough are falling in with the requirements of the Shops Acts.

(b) I should like to point out a situation arising in connection with the Section of the Shops Act which requires that assistants

must take the intervals for meals *within a prescribed time* : dinner between the hours of 11-30 a.m. and 2-30 p.m., tea between the hours of 4 p.m. and 7 p.m. For dinner, three-quarters of an hour is allowed provided the assistants take their meals on the premises, and one hour if the meal is taken off the premises. For tea, half-an-hour is allowed whether the meal is taken on or off the premises. Total for both meals, one and a quarter hours per day if the assistants take their meals on the premises, and one and a half hours per day if the meals are taken off the premises.

In the case of a complaint regarding an assistant not having dinner meal-hour within the prescribed time, I found that his employer gave him an interval of one and a half hours for dinner, half an hour for tea, and an interval of twenty minutes during the morning ; total, two hours and twenty minutes per day : as against the Shops Act requirements of one and a quarter hours if the meals are taken on the premises, and one and a half hours per day if the meals are taken off the premises.

Another assistant was given an interval of three hours for both meals from 1 p.m. to 4 p.m. each day. Although a much longer time than the Shops Act requires, the tea interval was not within the prescribed time.

In cases of this description, where the assistants complain, I find the shopkeeper is inclined to make them have both meals on the premises, and to reduce the meal-hours to the minimum provided by the Act.

(c) With regard to the *classification of mixed shops* (that is, shops where several trades or businesses are carried on) it is sometimes difficult for the tradesman to specify what he considers to be his *principal* trade or business. For instance, shopkeepers may be classified as Drapers and Milliners, although doing an extensive business in various other trades, such as Furniture, Boots and Shoes, Stationery, Jewellery, and Fancy Goods of all descriptions.

In large shops, where there is a proper system of book-keeping, the shopkeepers can readily specify the principal trade ; but in numerous small shops where a general business is carried on with no system of book-keeping, difficulties arise."

HOUSING.

The work of inspection under the Housing (Inspection of District) Regulations, 1910, and cognate administrative action, were interfered with by necessary and urgent work arising out of the prevalence of Scarlet Fever, and out of the inspection of military billets ; a large portion of the time of the Housing Inspectors during the greater part of the year being occupied by these matters. In the following summary, in respect of each of the dwellings recorded as "inspected" a very full record was made on a special form ; these records are filed and added to as occasion requires. A large number of houses in addition to those recorded below were rapidly inspected, time not allowing of complete records being made.

(A) ACTION UNDER THE HOUSING ACTS.

	<i>Number of Dwellings or "Tenements."</i>	<i>Number of "Houses."</i>
(a) <i>Action taken by Staff during 1914—</i>		
1. Dwellings inspected and records made	1336	716
2. " " and recorded as "unfit for human habitation" ..	137	57
3. Dwellings "represented" to local authority as "unfit"	81	31
(b) <i>Action taken by Local Authority during 1914—</i>		
4. Dwellings represented as "unfit" in respect of which <i>no action</i> was taken by the Local Authority ..	..	..
5. Dwellings represented as "unfit" in respect of which <i>action was</i> <i>deferred</i>	39	14
6. Dwellings in respect of which <i>Closing Orders</i> were made	38	15
7. Dwellings in respect of which <i>Demolition Orders</i> were made ..	..	..
8. Dwellings in respect of which <i>Closing Orders were determined</i>	4	1
(c) <i>Practical results obtained during 1914—</i>		
9. Dwellings actually closed—		
(a) without representation	25	18
(b) after representation and Closing Order	2	1

	<i>Number of Dwellings or “ Tenements.”</i>	<i>Number of “ Houses”</i>
10. Dwellings actually demolished—		
(a) without representation	11	11
(b) after Closing Order, but without Demolition Order	31	10
(c) after Demolition Order	2	2
11. Dwellings, previously “unfit,” rendered habitable—		
(a) without representation	55	21
(b) after representation, but without Closing Order . . . . .	..	..
(c) after Closing Order . . . . .	..	..

Note.—A list of the dwellings dealt with will be found in the Appendix (p. 150).

(B) GENERAL CHARACTER OF DEFECTS FOUND.

The principal defects which call for attention may, for practical purposes, be divided into two groups :—

- (1) Those defects inherent in the construction of the house, or arising out of its relation to surrounding properties.
- (2) Those defects which have arisen from lack of sufficient attention on the part of the owner of the property, or neglect and misuse by tenants.

In the first class are conditions which, generally speaking, are not aggravated by neglect; such as damp walls due to absence of damp-proof courses, or caused by the walls having been built against hillsides; dampness due to floors having been laid directly on the ground; defective lighting arising from deficient window space or from the house having been built in too close proximity to neighbouring buildings; absence of through ventilation in “back-to-back” houses; and deficient yard space. These are defects which nothing but reconstruction can repair.

In the second class are defects which have developed since the construction of the property, such as dampness due to defective spouting or leaking roofs; defective yard surfaces; dilapidated flooring, window-sashes, etc. For such progressive degeneration of property careless tenants are frequently partly to blame. It is obvious, too, that defective lighting can arise from windows obscured by dirt or an unnecessary profusion of curtains; that perhaps the most general cause of badly ventilated rooms is unwillingness to use the facilities provided for ventilation. The fetid atmosphere met with, summer and winter, in so many poor class dwellings is in most instances directly attributable to tightly shut windows.

But what can reasonably be aimed at in taking action under Section 17 of the 1909 Housing Act is the securing of houses with a certain minimum of structural efficiency ; houses which, *if properly used*, will provide healthy dwellings for the tenants inhabiting them.

(C) UNDERGROUND ROOMS USED AS SLEEPING PLACES.

Underground rooms within the meaning of sub-section (7) of Section 17 of the Housing Town Planning, etc., Act, 1909, are “rooms the surface of the floor of which is more than *three feet* below the surface of the part of the *street* adjoining or nearest to the room.”

This sub-section (subject to a proviso for user after a Closing Order has been made for purposes other than those of a sleeping place) enacts that such an underground room which is *habitually used as a sleeping place* shall (for the purposes of Section 17 of the Act) be deemed to be a dwelling-house unfit for habitation if the room either—

- (a) is not on an average at least seven feet in *height* from floor to ceiling ;
- (b) does not comply with such *regulations* as the local authority, with the consent of the Local Government Board, may prescribe for securing the proper *ventilation* and *lighting* of such rooms, and the protection thereof against *dampness*, *effluvia*, or *exhalation*.

The sub-section further enacts that if the Local Authority, after being required to do so by the Local Government Board, fail to make such regulations, or such regulations as the Board approve, the Board may themselves make them, and the regulations so made shall have effect as if they had been made by the Local Authority, with the consent of the Board.

On 17th April, 1914, a circular letter was issued to Local Authorities by the Local Government Board, dealing with the making of such regulations. The object of the circular is to suggest that—

- (1) A report should be prepared by the Medical Officer of Health upon the extent to which any houses in the district of the Local Authority come within the terms of the sub-section referred to above ;
- (2) The Local Authority should consider how far regulations are needed in the district.

The circular states “The Board feel that sufficient experience has not as yet been gained of the operation of regulations under the sub-section in cases where they have been made to justify them in issuing a *model series* ; but they enclose, for the information of

the Council a copy of *draft clauses* which have formed the basis of regulations made by a number of local authorities."

In accordance with the suggestion contained in the circular, investigations were made as to the number and situation of underground rooms in South Shields habitually used as sleeping places. On account of pressure of work it was, however, impossible to issue a comprehensive report on the subject before the end of the year.

(D) TOWN PLANNING.

On 10th September, 1914, the Town Planning Sub-Committee submitted a report to the Town Improvement Committee, acting as the Town Planning Committee for the Borough. The report dealt with the existing disadvantages of estate planning; the benefits of town planning; the procedure to be followed to obtain an order of the Local Government Board for a town planning scheme for the Borough; the area to be selected; the probable cost of a scheme; the Local Authorities concerned; etc. The report concluded:—

"We deem it desirable that the Committee should proceed at the present time with a Town Planning Scheme for the area described because of the development of building land in Harton, and the necessity for fixing upon the lines of main roads especially in view of the projected tramway and motor-bus extensions. It is necessary to make the application to the Board so as to apprise the land owners as early as possible of the intention to proceed, and thus enable the Council to enter into negotiations with them for the laying down of the lines of certain main roads. The way will thus be prepared for the making of such roads and enable work to be provided for the unemployed.

We therefore recommend—

That the Committee should ask the Council for authority to take the preliminary steps, including serving and publication of notices, for making application to the Local Government Board for authority to prepare a Town Planning Scheme for the area before described and shown on the map produced to the Committee enclosed with a red border, and such other steps in relation to such intended application as are required by the Act and Regulations, and to engage such assistance as may be required for the purpose.

And that the Committee should refer all matters arising out of this recommendation to us so that we may consider and report to the Committee as to the steps from time to time required to be taken to carry out such resolution.

We desire to point out that the adoption of this recommendation does not in any way commit the Council to any details in

connection with the town planning of the area suggested. It is simply the selection of a suitable area of land to be brought within the operation of the Act. All proposals for the development and lay out of this area will, if the Local Government Board give permission to prepare a scheme, be dealt with at the second stage of the procedure."

On the recommendation of the Town Planning Sub-Committee, this report was adopted by the Council at its meeting on 16th October, 1914.

(E) NEW HOUSES.

The number of new working-class houses erected in the Borough during 1914 was 101. Of these 37 were self-contained houses, and 64 were blocks of flats : the total number of dwellings or tenements contained in the 101 houses being 165.

(F) GENERAL OBSERVATIONS.

The housing conditions of the Borough were dealt with fully in my last Annual Report. As was pointed out in that report, there is a very marked scarcity of housing accommodation in the Borough ; and this scarcity has shown but little diminution during the past year.

The area of the Borough is very largely built over ; and the number of dwellings to the acre is very high—a fact particularly evident in comparatively recently developed districts such as Laygate and Deans.

The main drawbacks of the local housing conditions may be condensed into a phrase—overcrowded houses in over-built areas : an evil within an evil.

(G) SUPERVISION OF LODGING HOUSES.

Common Lodging Houses.

At the end of the year there were 25 Common Lodging Houses in the Borough, with registered accommodation for 897 lodgers. At only one of these houses is there accommodation for female lodgers, the total number so provided for being 7.

Ten of the Common Lodging Houses are registered under Section 69 (2) of the Public Health Acts Amendment Act, 1907.

The Sanitary Inspectors paid 155 visits to these houses, and served notices in respect of structural defects and neglect of cleanliness. (See Table 10).

The Police paid 1,756 visits and prosecuted three keepers of Common Lodging Houses for failing to keep the beds and bedding of the houses in a clean condition. Two of the defendants were fined, and the registration of the respective keepers was cancelled.

Subsequently the Medical Officer of Health reported that one of the houses—22-26, Mill Street—was not suitable for a Common Lodging House, and the Health Committee resolved that the premises should no longer be registered.

Two Common Lodging Houses were also demolished in connection with the extension of the Middle Dock Company's works in East Holborn.

Seamen's Lodging Houses.

There were 55 Seamen's Lodging Houses within the Borough at the end of the year, with licensed accommodation for 556 seamen.

The Sanitary Inspectors paid 216 visits to these houses during the year, and served notices in two instances owing to neglect of cleanliness.

The Police paid 1,052 visits.

Two Seamen's Lodging Houses were demolished during 1914, consequent upon the docks extension referred to above.

(H) TENTS AND BUNGALOWS ON THE SANDS.

During the past few years a practice has grown up among residents of the Borough and surrounding districts of camping during the summer months along the magnificent stretch of sands extending between the South Pier and the Trow Rocks. This part of the foreshore, a mile long and about a quarter of a mile in width, exercises a natural attraction for holiday makers in search of bracing air and healthy surroundings; and year by year the number of those applying for permission to erect tents and bungalows has increased.

As a result of certain complaints received, however, questions arose as to whether the practice was altogether a desirable one from the point of view of the campers themselves, of other summer visitors, and of the community at large; and I was asked to prepare a report on the subject. A report was accordingly submitted to the Parks Recreation Sub-Committee on March 3rd, 1914. The following are extracts:—

“ From the point of view of those who camp out in the tents, etc., there is no doubt that the practice may be conducive to health, *provided that certain precautions be taken*. Of these the following may be instanced:—

(a) Every care must be taken to secure adequate and continuous ventilation of the tents, etc. This is especially necessary on account of their restricted size, and (in the case of tents particularly) of the material of which they are constructed. In still weather, the atmosphere in a bell tent in which several persons have slept overnight with the curtains closed can be, by morning, positively injurious to health.

(b) The interior of the tents, etc., must be kept scrupulously clean ; all food refuse being removed at once and disposed of.

(c) Precautions must be taken to prevent contamination of the area of sand on which the tent is pitched, or of the surrounding sand, with excrement or refuse of any kind.

(d) Overcrowding must be guarded against as carefully as in ordinary dwellings.

(e) All receptacles used for the storage of water for drinking or cooking must be kept in good order and thoroughly clean.

(f) Personal cleanliness must be carefully observed.

From the point of view of the health of the community also it is essential that the above precautions be observed, as any laxity might favour the development and spread of infectious disease. Especial stress must be laid on the necessity for keeping the sands to which the public have access free from contamination by any form of excrement. This can be secured *only* if every occupant of every tent, etc., makes *use at all times* of a proper convenience such as that which has been provided at the Bents.

It is for your Sub-Committee to consider whether in their opinion the precautions which I have outlined *are likely to be observed in every case, or can be enforced.*

I should recommend, in the event of your deciding that it is desirable to allow tents on the sands, that the Council either exercise its powers under Section 9 of the Housing, etc., Act, 1885, and make Byelaws for their proper regulation ; or incorporate in the terms of the agreements conditions with this object.

I should also recommend the appointment of attendants who will be able, to some extent, to see that the required precautions are taken."

The Sub-Committee resolved—" That the Parks Committee be recommended not to allow tents or bungalows for camping purposes on the Sands during the coming season." This recommendation was accepted by the Committee, and confirmed by the Council.

CINEMATOGRAF THEATRES AND PUBLIC HEALTH.

The influence which attendance at picture theatres may exert on the health of young children, and the facilities that exist in such places of entertainment for the spread of infectious diseases, call for attention.

There can be no doubt that the habitual attendance of young children at evening performances, and especially at "second house" performances, after 9 p.m., is bound to have an adverse effect directly on the health of the children, and indirectly on their educational progress.

The spread of the contagion of infectious diseases must necessarily be favoured in places where persons gather together in large numbers, in close proximity to one another, and in darkness; the nature of the performances being such that adequate natural disinfection by sunlight and free currents of fresh air is prevented for long periods. The low admission charges encourage the attendance not only of children, but of members of some sections of the community among which inadequate attention is paid to personal cleanliness.

In many picture-halls steps are voluntarily taken towards securing hygienic conditions; but it is obviously desirable that the public should be safeguarded by some measure of general control.

Local Authorities have not power to obtain this control in the case of all places of public gathering. In the case of picture halls they have full powers under the Cinematograph Act, 1909.

It would appear to be desirable that clauses be inserted in the licenses of all cinematograph theatres to secure the following:—

(1) That the Local Health Authority, acting through the Health Committee, on the advice of the Medical Officer of Health, have power to require the exclusion from all performances in picture-halls of children under fourteen years of age, whenever, in the opinion of the Authority, this step is desirable, and for such period as may appear to be necessary, with a view to preventing the spread of infectious disease.

(2) That the arrangements for ventilation, natural lighting and cleansing be adequate, and be utilised to the satisfaction of the Medical Officer of Health.

(3) That "continuous performances" of more than four hours duration be prohibited.

(4) That no children of school age be admitted to picture-halls after 9 p.m.

NOTE.—In February, 1914, in view of the high incidence of Scarlet Fever, and of the probability that infection was being spread by unrecognised cases of the disease occurring among children, as well as by “contacts” of home-treated cases who, although excluded from school, were being allowed by careless parents to attend public places of amusement, I addressed a circular letter to the managers of all the cinematograph and other theatres in the Borough (fourteen in number), suggesting that by voluntary agreement the attendance of children under fourteen years of age at theatres might be prohibited for a period, say, of three or four weeks. I am glad to have an opportunity of placing on record my appreciation of the public spirit in which this suggestion was received and the readiness with which it was acted on by the majority of those to whom it was addressed. In a few cases, however, the suggestion was not fallen in with; one establishment in fact advertised forthwith a special matinee “for the benefit of school children”; and, feeling that unless uniformity of action could be secured a commercial advantage would accrue to those managements which were unwilling to help, to the disadvantage of the others, I withdrew my suggestion.

I may say that in more than one instance the opinion was expressed to me that it would be a good thing if compulsory powers were obtained by the local licensing authority, so that a general exclusion could be effected when occasion demanded.

MATERNITY AND INFANT WELFARE.

(A) GENERAL CONSIDERATIONS.

The comprehensive phrase "Maternity and Infant Welfare" has recently come to be recognised as the most convenient designation for a subject of paramount importance in Public Health Work. The subject is an extensive one ; its main features, however, may be defined as the study of all influences which affect, and the supervision of,

- (a) The health of mothers before, during, and after the birth of children ;
- (b) The health of children before birth, and from birth up to the age when they enter school—roughly, from birth to the age of 5 years.

Upon the health of the mother during and immediately after the period of pregnancy, and the nature of the assistance which is at her disposal at the time of childbirth, the stamina and physique of her child is intimately dependent. The chances against an overworked, or ignorant, or drunken mother producing and rearing healthy children are heavy ; and many disasters during childbirth have occurred as the result of the ministrations of well-meaning but unskilled grandmothers or officious and even more dangerous "Mrs. Gamps."

The amount of illness and the number of deaths among children during the first five years of life is so extensive as to be of grave importance to the community. Much of this illness and loss of life is *preventable* ; much is undoubtedly due to lack of knowledge, to lack of the appreciation of the principles of healthy living. Among young children, many defects which, if observed early and properly dealt with, could be quickly remedied, remain undetected until the time is past for effective interference. For example, a large number of defects found among school entrants at the routine medical inspection might have been removed, had they been detected, at a much earlier period ; the growth of many children has been impeded for years by such defects.

The health of children *over the age of five years* is already the subject of organised research and administrative action. With the passing of the Education (Administrative Provisions) Act, 1907, a new section of preventive health work was opened up. Local Authorities were required to provide for the medical inspection and supervision of a certain age-group of the general population—*children of school age* ; and effective machinery is now in operation throughout the country for dealing in some measure with this group. (The work done in South Shields is described in the "School Medical Service" section of this report).

It will, however, be apparent that the selection of this age-group, covering the 5th—14th years of life, for such special attention was mainly a matter of convenience; the “school age” was selected essentially because during that period individuals are grouped together handily by the existing system of elementary education, and are therefore easily dealt with from the administrative standpoint; the schools acting as centres for inspection, the school registers supplying lists of those to be examined, etc. The health of *children between birth and five years old* is of no less immediate importance than the health of children of school age. It might with justice be contended that the earliest years of life are more vitally important to the health of the growing organism.

It is, therefore, clear that the introduction of the medical inspection and supervision of children under school age would not imply a new movement, but rather the extension of an existing one.

(B) NEED FOR, AND NATURE OF, COMPREHENSIVE MEASURES.

Circulars dealing with Maternity and Infant Welfare were issued by the Local Government Board and by the Board of Education in July, 1914 (L.G.B., 30th July, 1914; B.O.E., Circular 852). Since then the whole subject has acquired an added and immediate importance from the outbreak of war. The present war will reproduce in unprecedented proportions many of the features of the great wars of the past. Two of these which claim our attention in the present connection are—

(1) The vast expenditure of human life, with the consequent imperative need for conserving life in the new generation, and for improving the stock;

(2) The distress which, sooner or later, will be felt among the industrial population; distress which must inevitably react disadvantageously on child-bearing and child rearing.

The circulars referred to above urge the need for local authorities developing comprehensive schemes for preventing illness among, and improving the health of, mothers and young children; and give particulars of the Exchequer Grants which will be available in aid of expenditure incurred. The following is a summary of a scheme on the lines suggested by the Local Government Board and Board of Education:—

(1) *A Maternity and Infant Welfare Clinic.*—A centre with adequate medical and nursing staff where—

(a) Expectant mothers, and mothers of young children attend to obtain advice and instruction regarding the hygiene of pregnancy, the care and management of infants, domestic and personal hygiene, etc. Facilities for attendance at organised classes to be provided.

(b) Infants are brought during the first year of life, weekly or fortnightly, to be weighed and examined, their progress noted, defects detected, and advice regarding ailments given.

(c) Children up to school age are examined on lines analogous to those of the existing "School Medical Service." (The Board of Education circular suggests that these children should be seen once in every one to four months according to age, physical condition, etc.)

Records to be kept of each case. Children's records to be subsequently handed on to the School Medical Inspection system ; in this way securing a continuous record of children from birth onwards.

(2) *Home Visitation*.—The provision of sufficient Health Nurses to undertake home visitation, at intervals, of expectant mothers, and of children from birth to school age ; with the object of instructing in hygiene, etc. The Local Government Board circular states "The work of home visitation is one to which the Board attach very great importance, and in promoting schemes . . . the first step should be the appointment of an adequate staff of Health Visitors."

(3) *Assistance during Childbirth*.—

(a) Inspection of Midwives ; arrangements for the systematic inspection and supervision of all midwives practising in the area.

(b) Provision of Midwives : required where the existing supply of trained midwives practising privately is insufficient for the needs of the district.

(c) Maternity Hospital : the provision of hospital accommodation for maternity cases, in which cases of difficult labour, of complications arising after childbirth, and complicated cases of pregnancy can be treated.

(4) *Lay Help*.—The carrying out by lay helpers, who have given special study to the problems involved, of home visiting, under the supervision of the trained staff.

Such are the outlines of a more or less complete scheme. In the following paragraphs there is some account of the measures which have already been adopted in South Shields, of the work done during 1914, and of the nature of possible developments.

(C) MATERNITY AND INFANT WELFARE CLINIC.

This was begun as a Clinic for Infants, at the Medical Officer's Department, at the end of 1913, in connection with investigations into the question of infant mortality in the Borough. Mothers were invited to bring their babies to be seen and weighed at the Clinic every afternoon. Beginning with one baby at the first meeting, at the second there was an attendance of three, at the third of seven. The highest number at any meeting during 1914 was 22.

Work done during 1914.

The number of mothers who attended with their babies during the year was 156. The total number of attendances made was 553.

The room set apart for the work was screened off at one end ; behind this screen the babies were taken in turn by the nurse, weighed, and examined. A record of the weight was entered at each visit on a card, which was given to the mother—a duplicate card being kept at the Clinic. Each visit was entered on a case-register. During the examination of the baby the nurse called the mother's attention to any condition which seemed to require medical treatment, and advised her to consult her family medical practitioner with regard to it.

Most of the mothers came regularly, and took great interest in the progress of their babies in weight.

The importance of breast-feeding in all cases where this can be carried out was impressed on the mothers. Where artificial feeding was unavoidable, advice was given as to nature and amount. Coupons were given in certain cases whereby supplies of a reliable preparation of dried milk could be obtained at a reduced rate.

Particular attention was paid to encouraging young mothers to attend the Clinic. The older mothers are unfortunately often beyond teaching—many of them being satisfied with the teachings of their own experience, oblivious to the fact that the undertaker has figured in it more prominently than might have been desired.

In a report on the work of the Clinic, Mrs. Arthur, who has been in charge of the work, and has done much to develop it, mentions the case of a premature child which she came across during home visiting, and which was brought to the Clinic on her advice. At birth the child weighed $2\frac{1}{2}$ lbs. Artificial feeding was necessary. On the first visit to the Clinic (the infant then being six weeks old) the weight was $3\frac{1}{2}$ lbs. After attending regularly at the Clinic, at 25 weeks old it weighed $9\frac{1}{2}$ lbs., and was particularly bright and lively, the flesh being firm and healthy. The parents had had little hope at birth of rearing the infant, although particularly anxious to do so, this being their first child.

During the warm weather, the nurse had talks with the mothers on the prevention of Summer Enteritis or Diarrhœa, and in the case of infants and children suffering from this disease, advising them to consult a doctor at an early stage, and pointing out the danger of delay. Cards were also distributed indicating the early symptoms, etc., of the condition.

Mothers were also instructed with regard to inexpensive and suitable clothing for young children in winter and summer.

Encouragement was also given to expectant mothers to attend the Clinic, and obtain information and simple instruction as regards the hygiene of pregnancy.

Nature of possible developments.

It will be observed from the above account of the work of the Clinic during the year that certain sections of the work outlined in the recommendations of the Local Government Board and Board of Education referred to above have not yet been undertaken. These may be briefly mentioned here.

(1) *School for Mothers*.—No systematic classes have been instituted for providing a continuous course of instruction to mothers on maternal and infant hygiene. Since the end of 1914 a detailed memorandum on this subject has been issued by the Board of Education ; this will be dealt with in a later report.

(2) *Day Nurseries*.—Regulations were issued by the Board of Education (26th November, 1914) accompanied by a Memorandum of even date, dealing with grants payable to Day Nurseries, and indicating the nature and use of these institutions. The need for Day Nurseries in South Shields, however much it may develop with the possible employment of married women in large numbers in connection with the making of munitions, is at present not great. Very little female labour is employed in the Borough. In 98 per cent. of the births investigated during 1914 the mothers were not engaged in any employment outside their household work.

(3) *Medical Inspection of Children under School Age*.—To get some idea of the extent of the field which would be opened up by a scheme for the medical inspection and supervision of children between birth and the age of five, it will be necessary to consider the number of children in the Borough who are under five years of age and the amount of sickness among children at this period as evidenced by the mortality returns.

(a) At the time of the Census (April, 1911) there were 13,994 children in South Shields under five years of age ; and 23,143 children aged five—fourteen. That is, the proportion of *children under school age* to *children of school age* was rather greater than 1 : 2. The former comprised 13 per cent. of the total population of the Borough of South Shields : the latter 21 per cent.

(b) During last year (1914) the *deaths* in South Shields among children of school age (5-14) numbered 99. During the same period the deaths of children under 5 years of age numbered 762. It may be taken that the incidence of *sickness* (of which no returns are available) was correspondingly heavy among young children.

The 0-5 group is, therefore, a large one numerically, and is marked by a high incidence of sickness and death. The fact may be emphasised that it is not only the puny infants and weaklings

who are attacked by or succumb to illness in early life. Other things being equal, the more robust are certainly less affected ; but many children whose deaths have been recorded in past years would, under better conditions, and with better attention, have survived and reached healthy adult life ; and many cases of delicate health in later life may be directly traced to preventable disease acquired in infancy.

The mortality of the first five years of life is greatest among children under one year old. The "Infant Mortality Rates" for South Shields and for the Country generally during the past ten years are shown in the following Table. (The Infant Mortality Rate for a district is the ratio of the number of deaths which have occurred in the district, in the year under consideration, among children under one year old, to the number of births which have occurred during the year in the district. It is expressed as a rate per 1,000 births ; and gives an idea of the number of children out of each 1,000 born, which die before reaching the age of one year).

<i>Infant Mortality Rates.</i>		
	<i>For South Shields.</i>	<i>For England and Wales.</i>
1905 ..	145	128
1906 ..	150	132
1907 ..	133	118
1908 ..	133	120
1909 ..	138	109
1910 ..	111	105
1911 ..	147	130
1912 ..	106	95
1913 ..	117	109
1914 ..	137	105

(D) HOME VISITING BY HEALTH NURSES.

Staff.

At the end of 1914, there were on the staff of the Medical Officer's Department four Health Nurses. Each of these gave a quarter of her time to work in connection with maternity and infant welfare ; there was thus the equivalent of one whole-time nurse for this work, which consisted mainly of home visiting and partly of attendance at the Maternity Clinic.

Number of Visits paid regarding Births.

During the year, 1,074 *visits* were paid to homes in which births had occurred. Of these

893 were first visits (cases not previously visited).

105 were second visits (cases already visited once in 1914 or 1913)).

76 were third or subsequent visits (cases already visited more than once in 1914 or 1913).

The number of *infants* regarding whom these visits were paid was 1,030 ; the majority of these having been born in 1914, the remainder in 1913.

The number of births registered in 1914 was 3,517 ; calculating from this figure and the number of births investigated during the year it is found that, roughly, 30 per cent. of births in the Borough are, under the present conditions, being visited by the Health Nurses.

At these visits advice and instruction were given to the mothers on infant feeding and management, and on the need for cleanliness in their homes and the observance of hygienic rules.

It will be noted that the number of *revisits* paid during the year was comparatively small—181 in all. These were chiefly confined to infants in delicate health.

Supervision was, however, urgently required in many other cases—for example, where the mothers were ignorant, or careless, or neglectful of their homes and of their infants.

Feeding of Infants.

The Health Visitors report that of the infants visited, 71 per cent. were breast-fed.

It is difficult to give accurate figures as to infant feeding in the Borough. From one visit it is hardly possible to say how a child is fed ; but bottle-feeding is not considerable. On the whole, children are breast-fed longer than they should be : children are often weaned at 18 months—sometimes they are nursed till they are two years old.

Occupation of Mothers.

98 per cent. of the mothers were not engaged in any occupation other than housework. As is shown in another section of this report (Outworkers, p. 57) there is little demand for female labour in the Borough.

Enquiries regarding Deaths of Infants.

During the year, 482 children died under the age of one year. Of these deaths, 60 were investigated by the Health Nurse.

Of the 60 cases, only 30 per cent. were breast-fed infants.

Thirty-nine cases of still-birth were also investigated during 1914.

(E) ASSISTANCE DURING CHILDBIRTH.**Inspection of Midwives.**

The inspection and supervision of all midwives practising in the Borough is carried out in accordance with the provisions of the Midwives Act, 1902.

The *Authority* under the Midwives Act, 1902, is the Council of the County Borough. In accordance with the provisions of Section 9, the powers conferred upon the Council by the Act have been delegated to the Health Committee.

Staff for Supervision of Midwives.—Mrs. Arthur, one of the Health Nurses on the staff of the Department, is responsible, under the Medical Officer of Health, for the inspection of midwives practising in the Borough.

Number of Midwives Practising in the Borough.—Since April 1st, 1910, it has been illegal for any woman to practise as a midwife unless her name is on the “Midwives Roll” as a woman certified by the Central Midwives Board. Unfortunately, the fact that a woman’s name is on this register is no guarantee that she has had any training, or is in any way skilled to act as a midwife. Under Section 2 of the Midwives Act, 1902, *any* woman who had been in practice as a midwife for one year previous to the passing of the Act could claim to become certified if she applied within two years after the passing of the Act. In this way a large number of totally untrained women became “certified.”

The number of untrained though “certified” midwives will automatically diminish as the older women cease practising; no new names being added to the Midwives Roll after 1904 except on the production of evidence of training satisfactory to the Central Midwives Board. Eventually, therefore, there will be no midwives on the Roll who have not been satisfactorily trained.

The number of certified midwives practising in South Shields during the last 10 years (since 1905, when it became illegal for an uncertified woman to *call* herself a midwife) is shown in the following Table; together with the number of women whose names were *added* to the local register during the period, and the number of women practising locally as midwives whose names were removed from the local register—either on account of their names being struck off the Roll of the Central Midwives Board (at their own request, or on account of misdemeanour, or on their death) or on account of their having ceased practising, or having left the town.

YEAR.	ADDED.	REMOVED.					Total on South Shields Register at end of year.
		Because of Negligence.	At own Request	Ceased Practising.	Left Town.	Died.	
1905	..	..	..	..	..	..	30
1906	1	..	..	..	..	1	30
1907	..	..	..	..	..	1	29
1908	..	..	..	..	..	..	29
1909	2 (both trained)	1	..	..	..	2	28
1910	1	..	..	..	1	1	27
1911	..	..	..	1	..	..	26
1912	..	1	..	..	1 (trained)	..	24
1913	2 (both trained)	..	..	1	..	1 (trained)	24
1914	2 (1 trained)	2	3	..	..	1	20

There is thus a steady diminution in the number of certified midwives in the Borough ; the new-comers being too few to make up for the number taken off the register.

Details of Inspection.—During the year the Inspector of Midwives paid 134 visits to the homes of midwives for the purpose of inspection. The Health Visitor reports that the appliances, bags, and case-books were found to be on the whole in a satisfactory condition. In many cases the midwives' dress is unsuitable. Many of the older women can neither read nor write. Entries are made in their register by friends from time to time, but such entries are chiefly guess-work, and probably a considerable number of cases is unrecorded.

Where necessary instruction and advice were given. Boracic acid has been supplied to midwives in some instances, and they have been urged to show mothers how to use it.

Thirteen visits were paid regarding cases of Puerperal Fever. The number of interviews with midwives at the Medical Officer's Department was 47.

Notifications received from Midwives.—In accordance with Rule E. 20, the following 172 notifications have been received from midwives :—

Stillbirths 39

Sending for medical help 133

This compares with 93 notifications similarly received during 1913.

Suspension of Midwives owing to Infectious Disease.—Six midwives were suspended from work during the year for short periods on account of cases of infectious disease occurring in their practices.

Cases of Puerperal Fever attended by Midwives.—Four cases of Puerperal Fever occurred in the practices of midwives ; of these cases, 3 died.

Cases of Negligence.—Four cases of negligence were reported to the Health Committee by the Medical Officer during 1914. These cases were as follows :—

(1) Midwife No. 19530 (F.C.).—This midwife attended a patient, Mrs. M., on 25th April. The patient was delivered of twins. She was seen on the third day by the Inspector of Midwives, and found to have a temperature of 101° , pulse 112. The midwife was warned that a medical practitioner should be sent for. The patient was seen by the Inspector on the fourth day : temperature 102.2° . The midwife furnished a notification on this day giving the patient's temperature as 97° . Patient had a severe cough, there was pain in the side, and history of a rigor. On the fifth day patient's temperature was 102° , pulse 108. One of the twins had been in a very feeble condition for some days. Ultimately this child died on the seventh day. Midwife ceased attending on the ninth day, stating that "no doctor was needed." The mother died on the eleventh day.

The midwife was reported to the Central Midwives Board for neglecting to send for medical help. The charge was found proven, and her name was struck off the Midwives Roll.

(2) Midwife No. 19345 (S.H.).—Attended patient, Mrs. D., on 8th April. Male child born. On seventh day medical help was sent for on account of condition of child's eyes. The medical practitioner called in notified Ophthalmia Neonatorum, stating on notification that although a discharge from the eyes had been noticed on the second day, he had not been sent for until five days later. The child was subsequently treated at an institution ; ulcers had formed on both eyes, one eye was without vision, the other had partial sight.

The midwife was reported to the Central Midwives Board for neglecting to send for medical help. The charge was found proven, and the midwife was severely censured by the Board. The Board further asked me to report at intervals on her subsequent conduct. Within the next six months Puerperal Fever occurred in the case of a patient whom she had delivered, the bedding and surroundings of the patient being in a neglected and filthy condition. The midwife proceeded to attend other midwifery patients without having undergone disinfection to the satisfaction of the Local Supervising Authority, in accordance with Rule E. 5.

The Board took a serious view of this case, and the midwife's name was removed from the Roll at the beginning of 1915.

(3) Midwife No. 17168 (E.A.D.).—Attended patient, Mrs. S., on 25th November, 1914. Patient developed shivering, pains, and

other symptoms of Puerperal Fever on second day. Midwife did not take temperature or advise sending for a doctor. The symptoms subsided, but complications supervened. In spite of this the midwife discontinued her attendance on the tenth day. The midwife was recalled on the thirteenth day by the patient; she then advised sending for a doctor, but neglected to send notice of this to the Local Supervising Authority. During her attendance on this case the midwife did not at any time take the pulse or temperature of the patient, as required by Rule E. 13; nor did she wear a clean dress of washable material, as required by Rule E. 1.

The midwife was reported to the Central Midwives Board. The charges were found proven, and her name was removed from the Roll at the beginning of 1915.

(4) Midwife No. 18934 (F.T.)—Attended patient, Mrs. S., on 28th May. On following day, and on subsequent days, patient complained of pain and rigors; midwife, however, did not advise, or seek, medical help; nor did she take the temperature or pulse of the patient at any of her visits. On 2nd June (sixth day) a medical practitioner was called in by the husband. He found that the patient was suffering from sapræmia, due to neglect on the part of the midwife. The next day midwife called: and said that there had been "no need to send for medical help." She refused to attend the patient after the tenth day without a further fee. The midwife's register, examined later, showed the case entered as up and well on the tenth day, although patient was then bedfast and under medical care.

The case was reported to the Central Midwives Board. The midwife's name was struck off the Roll.

Cases of Uncertified "Midwives" Practising.—In spite of the provisions of Section 1 (1) of the Midwives Act, that "After April 1st, 1910, no woman shall habitually and for gain attend women in childbirth (otherwise than under the direction of a qualified medical practitioner) unless she be certified under the Act"—the penalty on summary conviction not to exceed £10—uncertified women have continued to practise within the Borough after the above date. There is evidence, however, that this practice is decreasing.

One woman was taken before the magistrates during the year—Mrs. T., who attended cases on April 2nd, 1913, October 28th, 1913; December 3rd, 1913; December 11th, 1913; December 16th, 1913; the fees received being 10s., 2s. 6d., 7s. 6d., 7s. 6d., 7s. 6d. This woman had been engaged in advance for cases, so that the plea of emergency did not hold. She was fined 40s. and costs.

Maternity Hospital.

There is no Maternity Hospital in South Shields in which cases of difficult or complicated labour or of complicated pregnancies

can receive treatment. There is no doubt that the provision of accommodation for such cases would be of great value to the community. At present patients have to be treated under circumstances which are often such as to preclude the possibility of successful results.

(F) EXCHEQUER GRANTS AVAILABLE FOR MATERNITY AND INFANT WELFARE WORK.

The *amount of grant* suggested though not definitely promised, in the circulars above referred to, towards approved schemes is 50 per cent. of actual expenditure. The statement in the Local Government Board circular is "The grants will normally amount to one half of the approved expenditure . . . but may be less if the Board so decide." The statement in the Board of Education circular 852 is—"The maximum grant payable will be one half of the approved expenditure. Where the Board are not satisfied as to the scope or efficiency of the work, grant will be paid at a rate of less than one-half, and in extreme cases may be withheld altogether."

(N.B.—Grants to Institutions which are "primarily educational" will be administered by the Board of Education, grants to institutions which are concerned primarily with specific medical advice and treatment will be administered by the Local Government Board. Cases of doubt will be investigated by a Joint Committee of Officers of the two Boards).

A grant towards expenditure incurred in connection with the Maternity and Infant Welfare Clinic during the six months ending September, 1914, was applied for to the Local Government Board; and a contribution of 50 per cent. was received.

(G) ADOPTION OF THE NOTIFICATION OF BIRTHS ACT, 1907.

Adoption.

Following on a recommendation which I made to the Health Committee on 23rd September, 1913, the Council passed a resolution adopting the Notification of Births Act, 1907, within the County Borough of South Shields. The Local Government Board gave its consent to such adoption and fixed February 16th, 1914, as the date on which the resolution of adoption would come into operation.

Circular to Medical Practitioners and Midwives.

A circular was issued at the beginning of February to medical practitioners and midwives in the Borough directing attention to the following provisions of the Act:—

Section 1 (1).—In the case of every child born in an area in which this Act is adopted it shall be the duty of *the father of the child*, if he is actually residing in the house where the birth takes

place at the time of its occurrence, and of *any person in attendance upon the mother at the time of, or within six hours after, the birth, to give notice in writing* of the birth to the *Medical Officer of Health* of the district in which the child is born, in manner provided by this Section.

(2) *Notice under this Section* shall be given by posting a prepaid letter or postcard addressed to the Medical Officer of Health at his office or residence, giving the necessary information of the birth *within thirty-six hours after the birth*, or by delivering a written notice of the birth at the office or residence of the Medical Officer within the same time ; and the local authority shall supply without charge addressed and stamped postcards containing the form of notice to any medical practitioner or midwife residing or practising in their area, who applies for the same.

(3) Any person who fails to give notice of a birth in accordance with this Section shall be liable on summary conviction to a penalty not exceeding twenty shillings : Provided that a person shall not be liable to a penalty under this provision if he satisfies the court that he had reasonable grounds to believe that notice had been duly given by some other person.

(4) The notification required to be made under this Act shall be in addition to and not in substitution for the requirements of any Act relating to the registration of births ; and any registrar of births and deaths, whose sub-district or any part thereof is situate within any area in which this Act is adopted, shall at all reasonable times have access to notices of births received by the Medical Officer of Health under this Act, or to any book in which those notices may be recorded, for the purpose of obtaining information concerning births which may have occurred in his sub-district.

(5) This Section shall apply to any child which has issued forth from its mother after the expiration of the twenty-eighth week of pregnancy, whether alive or dead.

Intimation was also given that a supply of stamped and addressed postcards containing the form of notification could be obtained from the Medical Officer's Department.

Notifications received during 1914.

As stated above, the Act came into operation in the Borough on February 16th, 1914. The total number of notifications received between that date and the end of the year was 2,415, including 28 duplicate notifications. The number of births notified was 2,407, which included 40 ascertained cases of still-birth and 20 known instances of twin births. If the Act had been in force during the whole year, and notifications had come in throughout the year at the same rate, the total number of live births notified would have been 2,708.

The total number of births *registered* during the year was 3,517.

Although these two totals do not refer to the same group of births (notification is required within 36 hours after birth : registration is required within 6 weeks after birth) they may be compared as a guide. 2,708 notified out of a total of 3,517 represents a percentage of 77. This proportion may be expected to increase as the obligation for notification becomes better known.

Of the 2,415 notifications received, 33 per cent. were sent by medical practitioners, 60 per cent. by midwives, and 7 per cent. by relatives, etc.

(H) WARD DISTRIBUTION OF INFANT DEATHS.

The rate of infant mortality in South Shields is by no means uniform throughout the Borough. The following Table shows the infant mortality in the different Wards during 1914 :—

<i>Ward.</i>	<i>Infant Mortality Rate per 1,000 Births.</i>
Westoe	71
Beacon	103
Bents	109
Hadrian	116
St. Hilda	122
Rekendyke	129
Tyne Dock	146
West Park	146
Deans	148
Laygate	149
Victoria	149
Holborn	152
Simonside	162
Shields	184
Whole Borough	137

It will be seen from the Table that, during this period, a child born in the Westoe Ward had, on the average, nearly three times as good a chance of reaching the end of the first year of life as a child born in Shields Ward.

The *birth-rate* also varies markedly in the different Wards. The following are the rates for 1911 (the rates for 1914 cannot be given as the ward populations, on which the rates are based, cannot be estimated accurately for 1914) :—

<i>Ward.</i>	<i>Birth-rate per 1,000 Inhabitants.</i>
Bents	21
Westoe	24

<i>Ward.</i>	<i>Birth-rate per 1,000 Inhabitants.</i>
Hadrian	25
West Park	27
Beacon	29
St. Hilda	30
Holborn	31
Simonside	32
Tyne Dock	32
Victoria	33
Deans	33
Laygate	34
Shields	35
Rekendyke	37

(I) ENTERITIS.

The importance of Enteritis, and especially of Infective Enteritis or Summer Diarrhœa, as a factor in the death-rate has been referred to in previous reports. During the last five years the deaths from this disease in the Borough have been as follows :—

<i>Year.</i>	<i>No. of these deaths at all ages.</i>	<i>No. of these deaths which occurred in children under 2 years old.</i>
1910	69	60
1911	161	148
1912	32	20
1913	85	64
1914	129	105

During these five years the average annual number of deaths from Enteritis in the Borough was 95. *This corresponds to 5 per cent. of the total death-rate of the Borough.* The average annual number of deaths in children under two years from Enteritis during the period was 79. *This corresponds to 13 per cent. of the total deaths under two years.*

I think it is highly desirable—

(1) That the necessary steps be taken to extend the definition of “infectious disease” in the Infectious Disease (Notification) Act, 1889, in its application to the County Borough of South Shields to include Epidemic Enteritis ; in the first instance for a limited period, say up to December 31st, 1916.

(2) That suitable cases of Enteritis be treated at the Infant Clinic ; and, that when circumstances allow, and this course appears to be desirable, cases of the disease be admitted to the Deans Hospital for treatment.

THE WAR : HEALTH OF TROOPS, etc.

The Local Government Board desire Medical Officers of Health in their Annual Reports for 1914 to give "brief statements (1) as to changes in staff or emergency arrangements made in consequence of the War; (2) as to the action taken by the Medical Officer of Health to co-operate with the military authorities where troops have been quartered in the district." These matters, with one or two other points of interest, are dealt with in the following paragraphs.

Changes in Staff.

Two of the nurses on the staff of the department were called up for military service—Miss Allison, to the 2nd Northern General Hospital, Leeds, and Miss Smith (who had just been appointed) to the 3rd Scottish General Hospital, Glasgow. Temporary nurses were engaged to take their places. One of the clerks, Harry E. Cosans, joined the 5th Battalion, Northumberland Fusiliers (T.F.): his work is being done by a temporary clerk. Inspector R. Ayre has joined the 18th (Service) Battalion, Durham Light Infantry (County): the work of inspection in his district is being carried out at present by Mr. Smith, Shops Inspector.

Co-operation with Military Authorities.

Since the outbreak of War troops have been quartered within the area of the County Borough. As to the numbers of troops billeted in the town, or the number of public buildings, etc. occupied as billets, it would appear to be undesirable to publish information in this report. It will be sufficient to indicate briefly the general nature of the work carried out by the staff of my department and by myself, in consultation and co-operation with the military authorities. It will be of interest first to refer to certain official communications issued by the War Office and the Local Government Board.

General Officers Commanding were directed by the War Office to communicate with the Medical Officer of Health of an area before troops were drafted to that area for billeting. This instruction was contained in a War Office letter of 10th October, 1914, to General Officers Commanding-in-Chief. The letter states—"The Army Council direct that you are to communicate with the Medical Officer of Health for the district before troops march in, with a view to obtaining his expert advice and co-operation in billeting the incoming troops under the best sanitary conditions obtainable . . . When camps are formed and maintained, the Medical Officer of Health is also to be consulted . . . When in the interests of the public health or of the troops the Medical Officer of Health feels compelled to submit written recommendations,

these will be forwarded without delay through the Deputy-Director of Medical Services of the Command to the War Office."

In a letter from the Local Government Board, dated 31st August, 1914, it was suggested that Medical Officers of Health would be "able to give valuable information and assistance to Military Sanitary Officers" in many directions, as for example, in advising as to water supplies and the protection of water supplies from contamination; in the control of infectious disease, and in arranging for hospital provision for the ordinary infectious diseases and for convalescent cases of Enteric Fever, etc. "It will be important for each Medical Officer of Health to keep the Medical Officer in charge of any local troops informed of any cases of infectious disease within his area, and it is desirable to ask this officer to give him information similarly of these diseases among the troops." Reference was made to the facts that the three diseases for which, under present circumstances a constant look-out should be kept are *Typhus Fever*, *Enteric Fever*, and *Smallpox*, and that the War Office were arranging for each Medical Officer of Health to have notified to him any soldiers convalescent from Enteric Fever coming into his area, with a view to these cases being kept under supervision.

The value of anti-typhoid inoculation was also dealt with in this letter; and hospital accommodation was referred to—"a large increase of hospital accommodation for Enteric Fever, and possibly also for Smallpox, may be needed."

A further letter issued by the Local Government Board on 21st October, 1914, referred to the "assistance which Local Authorities and their expert Sanitary Officers can give in connection with the sanitary condition of military quarters, the prevention of infectious disease, and other matters affecting the health of troops."

This letter urged the desirability of Medical Officers of Health and members of their staff carrying out "the close and continued oversight of the sanitary conditions of billets and military camps."

. . . "It is essential that the civil and military authorities should work in the closest co-operation in preventing the spread of disease." Among the duties specially assigned to the Medical Officer of Health were the following:—Advising the Local Authority as to any conditions in which services can be rendered by them in connection with the health of the military population, *e.g.*, by providing hospital accommodation for infectious disease, disinfecting clothing and blankets, etc., "inspecting systematically billets, and also camps or other places solely in military occupation," as to water supply, etc., and for the prevention of exposure to infection; taking action by recommendations to the military authorities, by reports to the Sanitary Authority, or otherwise, with a view to the removal of

any dangerous conditions''; and advising the Medical Officers with the troops as to local cases of infectious disease.

With reference to the supervision of food, etc., for the troops, a circular letter (dated 1st October, 1914) was addressed by the War Office to General Officers Commanding directing attention to the need for the careful inspection and supervision of food supply; and indicating the desirability of Military Medical Officers asking for the co-operation and assistance of Medical Officers of Health in inspecting and keeping watch over the premises of contractors and others who may be supplying foodstuffs, beverages, etc., for the use of the troops.

From the outbreak of War my department has been in constant and cordial co-operation with the local military authorities in connection with the matters referred to in the official communications quoted above.

With regard to *billets*, I thought it advisable to have a thorough investigation made at once into the circumstances of every billet in the town: a complete record being made of dimensions of all rooms used as sleeping quarters, dining-rooms, kitchens, etc.; of nature of floor surfaces, facilities for natural and artificial lighting, ventilation, and warming; nature of cooking apparatus, extraction of fumes therefrom, etc.; arrangements for disposal of refuse, personal washing and washing of clothes, etc.; number of men in occupation, in relation to accommodation of sleeping quarters. Subsequently, each billet has been reinspected from time to time. All arrangements which appeared unsatisfactory have been made the subject of consultation with the military authorities; and plans for new billets have been discussed.

The occurrence of cases of *infectious disease* among the troops and among the civil population has been the subject of interchange of information between the military medical staff and myself. I have seen in consultation a number of cases of illness—men suspected to be suffering from infectious conditions, and others; and arrangements have been made for the admission of cases of infectious disease occurring among the troops in the Borough to the Deans Hospital for treatment. I am glad to say that up to the end of the year only two such cases of notifiable infectious disease occurred: both men suffering from Scarlet Fever. In addition to these two cases, thirty-two "contacts" were admitted to hospital, and placed in quarantine in a vacant ward.

Facilities for having *bacteriological and pathological* specimens examined at the Municipal Laboratory have been given to the military authorities; and arrangements have been made for *anti-typhoid inoculation* of civil cases at my department. The *disinfection* of large quantities of bedding, uniforms, etc., has been carried out at the Deans Hospital.

Premises in the Borough, in which *food* for the use of troops has been prepared, have been systematically inspected and supervised : observation also being made as to the wholesomeness of the materials employed.

Deaths in South Shields among H.M. Forces.

The following deaths occurred in South Shields during the year among members of H.M. forces :—

- (1) Stoker, H.M.S. " Ettrick " : September 21st—Fracture of skull, caused by fall from ladder whilst returning to ship. Death occurred in the Ingham Infirmary.
- (2) Private, 3rd Battalion Durham Light Infantry : October 11th—Gastric Ulcer. Death occurred in Ingham Infirmary.
- (3) Private, 7th Battalion Durham Light Infantry : December 7th—Pneumonia. Death occurred at deceased's private address.
- (4) Seaman, H.M.S. " Doon " : December 17th—Shell wound received in action ; fractured spine. (Bombardment of Hartlepool by ships of the German Navy). Death occurred in the Ingham Infirmary.
- (5) Corporal, Royal Garrison Artillery : December 17th—Suicide by drowning.

Food during War-Time.

A leaflet was issued during the year for distribution at the various Clinics, by the Health Nurses in the homes visited, and by teachers in the schools, etc., dealing with the need for economy during war-time. The nature of different kinds of food was indicated, and inexpensive and nourishing dishes described.

SCHOOL MEDICAL SERVICE.

(A) STAFF AND GENERAL ARRANGEMENTS.

The present staff for the medical and dental inspection and treatment of children of school age consists, in addition to the principal School Medical Officer, of two Assistant School Medical Officers, a part-time Operating Surgeon, a part-time Dental Officer, and four Health Nurses each of whom gives part of her time to school work.

The time of one Assistant Medical Officer is taken up mainly with routine medical inspection and work in connection with the clinics. Dr. Taylor carried out these duties until 14th November, 1914, when he left to take up another appointment; he was succeeded by Dr. Douglas Martin, who commenced work on 24th December. Owing to the interval of nearly six weeks that elapsed between Dr. Taylor leaving and Dr. Martin taking up his duties, a certain amount of routine medical inspection was unavoidably held over. The clinics, however, were carried on during this period. Dr. Lyons, the other Assistant School Medical Officer, is concerned in that capacity chiefly with the examination of children with chest diseases, suspected Tuberculosis, etc.

The work of Dr. Crosby, the Operating Surgeon, is confined at present to the operative treatment of cases of obstruction in the nose and throat—adenoids, enlarged tonsils, etc. Mr. Diack, the Dental Officer, devotes three half-days per week to dental inspection and treatment.

The co-ordination of the school medical service with the earlier-established public health work of the Borough, and the unification of the Authority's medical work into one Medical Department, have continued to prove convenient and economical from an administrative standpoint.

(B) ROUTINE MEDICAL INSPECTION.

Arrangements.

The object of "routine" medical inspection is to secure the examination of each individual school child at certain periods of school life.

The arrangements for routine medical inspection in the schools include the notification of the parents of children to be examined of the date and time of inspection, with an invitation to attend.

With regard to every child found on inspection to require skilled medical or dental treatment, a printed notice was given or sent to the parents, directing their attention to the fact that such treatment was required, and urging them to consult, without delay, their family medical or dental attendant.

The arrangements made for the "following-up" of those children who required treatment have been greatly improved by the re-organisation and increase in the nursing staff of the department. This increase, however, did not take practical effect before the end of the year. An additional nurse was appointed to the staff of the department in July; this brought the number of nurses to four, each of whom was to give half of her time to work in connection with school medical inspection, the school clinics, etc. But subsequent to War being declared, two of the nurses were called away on military duty; and their places were not filled until November, 1914, and January, 1915, respectively.

General Facts : Scope of Inspection, etc.

The number of children on the registers of public elementary schools in the Borough, at the end of 1914, was 22,397.

Visits were paid to the schools in the morning and afternoon sessions; the total number of inspections being 53.

Routine medical inspection was restricted to two groups of children :—

1. Entrants (ages chiefly 4, 5, 6);
2. Leavers (ages chiefly 12, 13).

The number of children in these groups who were examined during the year at routine inspections was as follows :—

Entrants :	Boys	1,119	}	2,238	}	5,018
	Girls	1,119				
Leavers :	Boys	1,460	}	2,780		
	Girls	1,320				

The age-distribution of children examined is shown in the following Table :—

<i>Age.</i>	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
4	143	117	260
5	702	686	1,388
6	233	264	497
7	32	41	73
8	9	11	20
9 . . . .	..	..	..
10	1	1	2
11	4	..	4
12	763	747	1,510
13	675	559	1,234
14	15	13	28
15	1	..	1
16 . . . .	..	..	..
17	1	..	1
Totals	2,579	2,439	5,018

In the past few years there has been a considerable discrepancy between the numbers of "entrants" examined and the number of "leavers." This will be seen from the following Table :—

	<i>Entrants.</i>	<i>Leavers.</i>
1909....	872	1,981 (Part year only).
1910....	1,906	2,224
1911....	2,985	1,398
1912....	2,399	1,374
1913....	4,423	1,563
1914....	2,238	2,780

It will be observed that during 1911, 1912, and 1913, the number of "entrants" examined very largely exceeded the number of "leavers." In the year just passed these two groups have more closely approximated. The reasons for this are chiefly :—

(a). Steps were taken to prevent the presentation for examination at the "entrants" inspection of infants who had been examined in the previous year. It was found that a considerable amount of duplication of this kind had been occurring, children being examined twice or thrice as "entrants" in successive years. While it would undoubtedly be advantageous to have each child examined yearly, it would obviously be impossible to carry the work out with staff provided for one examination only in the early years of school life.

(b). In previous years children were not examined as "leavers" until they had reached the age of thirteen; and a considerable number escaped inspection owing to their leaving school before the date of the inspector's visit. During the past year, the term "leaver" was extended to all children who had passed their twelfth birthday, and so all children of twelve and thirteen years of age who had not previously been examined as leavers came up for inspection. Further, the examination of this group was undertaken immediately after the commencement of the year; and arrangements were made with the Head Teachers whereby any child who was allowed to leave school before the usual age, or who had been absent from school on the date of inspection, could be examined later in the year. In this way leakage was very largely diminished.

The fixing of the "leavers" age at twelve instead of thirteen has a further and very important practical advantage: it gives more time for "following-up," before the child leaves school, any defects which may be found. Formerly a large proportion of the children examined left within a few weeks or even days of the inspection; and once away from school and the supervision of the Local Authority, the chance of any treatment being obtained for defects was comparatively small.

Presence of Parents at Routine Inspections.

Parents were present at 73.7 per cent. of the inspections. As has been pointed out in previous annual reports, the enlisting of the interest and attention of the parents is of the greatest value in producing practical results from the work of inspection.

During previous years, the percentage of parents attending routine inspections was as follows :—

1909	.....73	per cent.
1910	.....75.5	„
1911	.....80	„
1912	.....80	„
1913	.....81.5	„

The parents attend better with the younger children than with those leaving school. This fact accounts for the lower percentage attendance in 1914, as compared with the preceding year, where (as has already been pointed out) the number of young children examined was relatively high. Some of the older boys, indeed, ask their mothers not to attend the inspections. The following Table shows the attendances for the year :—

Age Period.	No. Examined.	No. of cases in which Parents attended.	Percentage.
Entering school	2,238	1,849	82.6
Leaving school	2,780	1,846	66.4
Total	5,018	3,695	73.7

Children absent from Routine Inspections.

The number of children whose inspection had been arranged for, but who were absent on the date fixed and were not examined later in the year in accordance with the arrangements referred to in a previous paragraph, was 142.

Age Period.	No. Examined.	No. Absent.	Percentage.
Entering school	2,238	80	3.6
Leaving school	2,780	62	2.2
Total	5,018	142	2.8

During the previous year (1913) the percentage of missed cases was 7.8. The improvement in the past year is partly attributable to the arrangements now in force for children missed at inspections being examined at a later date.

There were three instances of objections on the part of parents to having children examined—one “entrant” at Mortimer Road

Infants' School, and two "leavers" at Holy Trinity Girls' School and Baring Street Girls' School.

Principal Defects found : those requiring Treatment.

The discovery of defects requiring treatment must be regarded as the primary object of routine medical inspection.

Of the 5,018 children inspected, 794 or 15.8 per cent. were found to require medical attention. The defects present numbered 818 ; all of these defects showed some urgency in themselves or were definitely affecting the general health of the child. They were as follows :—

	<i>No. of Defects requiring Treatment.</i>	<i>Percentage of Total Children inspected in whom such defects were found.</i>
Defective Sight and Eye Diseases ..	289	5.76
Defective Teeth (septic conditions, etc.)	136	2.71
Skin Diseases (including Ringworm)	122	2.43
Nasopharyngeal Obstruction or Disease	114	2.27
Deafness and Ear Diseases	84	1.67
Other Defects (including Heart Defects, Anæmia, Spinal Curvature, Tuberculosis, etc.)	<u>73</u>	<u>1.23</u>

The treatment obtained for the above defects, and the number of children who were allowed by their parents to remain untreated, are discussed under "Treatment" in a later section of this report. See page 107.

Detailed consideration of facts revealed at Routine Inspections.

Under this heading it is proposed to review in some detail the facts revealed with regard to the 5,018 children who were examined during the year at routine inspections. A tabular statement will be found at the end of the report. (See page 120).

Clothing and Footgear.—Children are often specially cleansed and dressed for the medical inspection ; this is an obstacle in the way of obtaining accurate information as to general cleanliness and sufficiency of clothing. The teacher who sees the child every day has better opportunities of studying these subjects than the medical inspector.

The results recorded under these heads at medical inspections must, therefore, be regarded as having only a modified value. As regards clothing they are as follows :—In the case of 14.0 per cent. of the "entrants," and 12.9 per cent. of the "leavers" the condition of the clothing and footgear was unsatisfactory ; the remainder being considered satisfactory or passable.

Condition of the Skin.—Of the children examined 2.3 per cent. had marked *pediculosis of the head*—the entrants being 3.8 per cent., the leavers, 1.2. The corresponding figures for last year were 2.2 per cent., 2.4 per cent., and 1.5 per cent. *Pediculosis of the body* was present in 1.3 per cent. of the children examined. 13.6 per cent. were classed as “*dirty*”—the entrants being 14.1 per cent., the leavers, 13.2 per cent. No children were dealt with under Section 122 of the Children Act, 1908, during the year. Unfortunately, however, there were at the end of the year several bad cases outstanding for which prosecution appeared inevitable, no amount of persuasion availing to secure treatment at the hands of careless and sluttish parents. As I have previously stated, the weakness of our powers for dealing with pediculosis lies in the fact that they apply only to children. Children under school age, children who have left school, and adults, are as susceptible, and harbour the disease as effectively, as children attending school. The limitation of its treatment to cases occurring in children of school age tends to obscure the fact that in this, as in other directions, the health of the school children is merely a particular age-section of the general Public Health.

The following cases of skin diseases were also found :—

	<i>No. of Cases.</i>
Impetigo Contagiosa	77
Ringworm	27
Eczema	14
Alopecia	11
Ichthyosis	10
Seborrhœa Capitis	6
Scabies	5
Lichen Urticatus.....	4
Psoriasis	4
Seborrhœa Sicca	3
Herpes	1
Urticaria	1
Acne	1
Leucoderma	1
Chilblains	1
	<hr/>
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Nutrition : Physically Subnormal Children.—Subnormal nutrition, detected from examination of the mucous membranes, the tone of the hair and of the subcutaneous tissues, and the general functional activity of the child, rather than from the height and weight alone—considerable variations from the average in height and weight being not inconsistent with good health—was present

in 620 (12.4 per cent.) of the children inspected. It is necessary to emphasise the fact that these were not all "neglected" children, or children from poor homes. Injudicious feeding, pampering, "overclothing," disease in early life, and hereditary tendencies are factors which contribute to the production of weakly children as effectively as neglect and insufficient feeding. Also, a number of the children here classed as physically subnormal were convalescing from illnesses. For physically subnormal children the value of schools held in the open-air is now fully recognised ; this subject is referred to later in this report.

Nose and Throat.—The importance of obstruction to free respiration caused chiefly by the overgrowth of adenoid tissue in the nose and throat is now generally recognised. Of the children examined during the year, 209 (4.2 per cent.) were found to be chronic mouth-breathers ; 392 (7.8 per cent.) had some degree of tonsillar enlargement ; 137 (2.7 per cent.) showed evidence of the presence of adenoids ; 4 had other forms of obstruction.

Children who, either as the result of nasopharyngeal obstruction or of unchecked habit, are chronic mouth-breathers, show on the average distinct evidence of a lower level of mental capacity and educational attainment. The habit of mouth-breathing, once acquired, is difficult to eradicate, even after its cause has been removed. Great care should be taken by parents and teachers after, say, operations for adenoids, to encourage children constantly to breathe with the mouth shut.

Hearing, Ear Diseases, etc.—The hearing of the children was tested and recorded by the whisper method. It was found that 102 children (2.0 per cent.) could not hear with either ear at a greater distance than ten feet a whisper which was normally audible at twenty feet ; while 10 children (.2 per cent.) had to come within five feet in order to hear. Thirty-five children showed some defect of hearing in one ear only.

Of the 147 recorded cases of defective hearing, 103 (70 per cent.) were found among those children who were leaving school.

Otorrhœa (discharge from the ears) was observed in 62 instances—27 entrants and 35 leavers ; equivalent to 1.2 per cent. of the total children examined, 1.2 per cent. of the entrants, and 1.3 per cent. of the leavers.

Sight, Eye Diseases, etc.—Sight testing with Snellen cards was, in accordance with the suggestion of the Board of Education, restricted to the older children. Of the 2,780 children examined, 1,819 (65.4 per cent.) were found to have normal vision in both eyes. The remaining 961 (34.6 per cent.) had some defect of sight ; 300 of these being defective in one eye only.

The amount of visual defect present in the eyes which had not normal vision may be gathered from the Table below. The fractions are to be interpreted as follows : 6/9 means that the eye cannot recognise letters which it ought to read at *nine* metres distance at a greater distance than *six* metres : 6/12 means that the eye cannot recognise letters which it ought to read at *twelve* metres at a greater distance than *six* metres, etc.

<i>Visual Acuity.</i>	<i>No. of Eyes having this Vision.</i>	<i>Percentage of Total Eyes Examined.</i>
6/6	3,938	71.0
6/9	514	9.2
6/12.....	380	6.8
6/18.....	342	6.1
6/24.....	196	3.6
6/36.....	106	1.8
6/60.....	57	1.0
Less than 6/60.....	22	.4
No vision	5	.1
	<u>5,560</u>	<u>100.0</u>

The number of children who at the time of examination were already wearing suitable spectacles was 125 (2.5 per cent.). Of these 27 were “entrants” and 98 “leavers.”

Strabismus (“squint”) was present in 64 (2.3 per cent.) of the leavers examined, and in 84 (3.8 per cent.) of the entrants.

Blepharitis (inflammation of the lids of the eyes) was found in 21 entrants (.9 per cent.), and 27 leavers (1.0 per cent.).

Conjunctivitis was present in 11 children examined as entrants (0.5 per cent.), and 2 examined as leavers (0.1 per cent.).

Other eye diseases and defects were found in the case of 65 children.

Teeth.—787 of the children inspected at routine medical inspections, or 15.7 per cent., are recorded as having “sound dentition,” or no defective teeth. 2,721 or 54.2 per cent. had less than four defective ; and 1,510 or 30.1 per cent. had four or more defective teeth. The examination of the teeth which is practicable at a routine medical inspection cannot, however, be regarded as thorough ; and the estimate of children with sound teeth given above is over the mark. An expert and detailed examination by a dental surgeon would reveal a greater proportion of dental caries.

In 160 cases oral sepsis was present.

The results of special inspections carried out by the School Dental Officer are shown on p. 103.

Lung Diseases.—To facilitate the examination of the chest each child inspected is stripped to the waist. No cases of *Tuberculosis of the Lungs* are recorded as having been detected at inspections in the schools ; but 19 cases of *suspected* lung tuberculosis were noted. The difficulty in detecting pulmonary tuberculosis at examinations in the school was referred to in my last annual report. As was there stated, in the majority of the schools it is impossible to set apart a room which is sufficiently secluded to allow of perfect quietness and freedom from noise ; and unless quiet can be obtained, a thorough examination of the lungs and heart cannot be carried out. In particular, one cannot hope to do justice to early cases of pulmonary tuberculosis, where the physical signs are often extremely delicate and difficult to detect. This is a drawback of the regulations of the Board of Education which require that routine inspections must take place in the schools themselves. The difficulty has been met to some extent by making use of the school clinic for the *re-examination* of all doubtful cases. But the fact remains that routine medical inspection would be more efficient, more searching, and productive of better results if conducted in well-equipped clinics than in totally unsuitable school premises.

Chronic Bronchitis and Bronchial Catarrh were present in 92 (1.8 per cent.) of the children examined. Of these cases, 56 were found among the young children (entrants) and 36 among the “leavers.”

Deformities.—49 children showed deformities. These were as follows :—

Pigeon chest	5
Spinal curvature	5
Injury, etc., to one eye (Blindness)	4
Congenital dislocation of hip	3
Arrested tuberculous disease of hip	3
Cleft palate	3
Wry neck	3
Dislocated shoulder	2
Genu valgum	2
Flat foot	2
Pes cavus	2
Talipes	2
Bent femora and tibiae	1
Deformed hand	1
Stiff elbow	1
Paralysis, arms	1
Dislocation left scapula	1
Syndactylism	1

Nasal deformity	1
Leg amputated	1
Absence of hand and half forearm.....	1
Ankylosis of knee	1
Depression of skull	1
Perforated palate	1
Arrested tuberculous disease of spine ..	1

Nervous Diseases.—Epilepsy was found in 4 cases ; Chorea in 2 ; and 12 cases of various other forms of nervous disease were detected.

Rickets.—34 of the children examined (0.7 per cent.) showed evidence of Rickets ; 6 of these being marked cases of the disease.

Non-pulmonary Tuberculosis.—Glandular Tuberculosis was found in 9 (0.2 per cent.) of the children examined. There were 8 cases of other forms of non-pulmonary Tuberculosis.

Glands.—252 children had definitely enlarged neck glands, the cause of the enlargement being doubtful :—

	No. Examined.	No. with Enlarged Glands.	Per- centage.
Entrants	2,238	113	5.0
Leavers	2,780	139	5.0
	5,018	252	5.0

Certain Infectious Diseases.—9 children were discovered at inspections to be suffering from the following diseases :—

Chickenpox	3
Scarlatina	1
Congenital Syphilis.....	5

Gastro-intestinal Conditions.—7 children were found to be suffering from gastro-intestinal conditions. These were as follows :—

Hernia (rupture)	4 cases.
Gastritis	2 „
Diarrhoea	1 case.

Speech Defects.—Speech was defective in 75 (1.4 per cent.) of the children examined. 37 of these were stammerers, 2 were dumb, the remaining 36 having various forms of defective articulation.

Mental Condition.—The mental condition of the “leavers” examined is shown in the following Table :—

	Boys.	Girls.	Total.	Per cent.
Bright	465	320	785	28.2
Normal	838	845	1,683	60.5
Dull	152	149	301	10.8
Mentally Defective	5	6	11	.4
Total	1,460	1,320	2,780	..

Heart and Circulation.—Organic heart disease was found in 44 children (0.9 per cent.) There were also 22 cases of *functional* heart disease.

Eight children (0.2 per cent. of those examined) were found to be suffering from marked *anæmia*.

Other defects.—Forty-nine other defects were found at routine inspections, of which the following may be noted :—

Undescended testicle	3
Synovitis	2
Ganglion	2
Rheumatism.....	2
Hydrocele of cord	1
Nephritis	1
Coccydynia	1

Height and Weight.—At all routine inspections a record is made of the height and weight of the children examined.

(a) A knowledge of these particulars is of considerable value to the medical inspector in the case of a proportion of the children examined, particularly with regard to the relation of weight to height. In the majority of cases, however, an isolated weighing and measuring carried out only at the routine inspections—that is, twice or thrice in the course of a child’s school life—is of little or no scientific value. What would be of real and great value would be, say, a *monthly* weighing and measuring, a graphic record being made for each child. If such a system were introduced, the weighings, etc., being carried out in the schools by the school staff, a falling away from the normal rate of growth in the case of any particular child could be noted at once, and the child referred to the medical officer for examination. The inception of chronic disease, or the introduction of harmful influences into the life of a child, would be detected, and appropriate steps taken.

(b) From the records of heights and weights of individual children summaries can be made, and tables constructed showing the average height and weight at different ages of the boys and girls attending the elementary schools in the district. In the annual reports on school medical inspection for the five years (1909-1913)

such summaries have been published. The preparation of these summaries has involved a great deal of statistical work of a particularly monotonous character ; but very interesting information has been obtained as to the stature and weight of South Shields children as compared with the children of the country as a whole.

There are, however, limits to the usefulness of the accumulation of such statistics. Once a sufficiently large number of cases have been dealt with and summarised further investigations are likely to do no more than reproduce the results already arrived at.

During the 1909-1913 period some 25,000 children were examined in South Shields ; this would appear to be a sufficient number to establish, for practical purposes, local standards of height and weight. At best these results can only be accepted as approximately definite owing to the fact that the methods employed are not accurately standardised. For example, children are weighed with their clothes on, and the variation in the weight of the clothes introduces a large element of error.

In view of these considerations it has been thought desirable not to issue in this report a summary of the heights and weights of the children examined during the year, and to discontinue the preparation of these summaries for the present. At a future date a fresh series of investigations may be carried out and the results of these compared with the 1909-1913 group of statistics.

(c) It is relevant here to refer to a result which may reasonably be anticipated of the war. The general physical standard of the men who have joined the colours is necessarily on the average distinctly better than that of the men who have not joined. Only men above a certain level of physique are accepted ; men of smaller build or weaker constitutions are rejected. A heavy loss of life has occurred and is yet to occur among the men who are fighting with our armies. No corresponding wastage is occurring among those who are not so fighting. The result must be that the average physical standard in this country of males of the ages of say 20-40 will be much lower after the war than it was before the war. This lowered standard will be reflected in children born in subsequent years ; and will begin to be recorded at school medical inspections about the year 1921, when the children, born in 1916, are entering upon their school life.

The effect of such a war as the present on the national health cannot be slight, nor can it be transient ; it will be felt not for years only but for generations.

Proportion who had suffered from Infectious Fevers.—At each inspection enquiries were made regarding the infectious illnesses from which the children had suffered. It was found that the infection recorded in the greatest number of cases was Measles ;

Whooping Cough being the next commonest, and Chickenpox, Scarlet Fever, and Diphtheria following in the order given :—

Diseases from which Children had suffered.	Entrants.		Leavers.		Total.	
	Total.	Per cent.	Total.	Per cent.	Total.	Per cent.
Measles	1,300	58.1	2,116	76.1	3,416	68.1
Whooping Cough	718	32.1	901	32.4	1,619	32.3
Chickenpox	356	15.9	650	23.4	1,006	20.0
Scarlet Fever	193	8.6	334	12.0	527	10.5
Diphtheria	19	.8	63	2.3	82	1.6
Total Examined	2,238	..	2,780	..	5,018	..

The importance of Measles and Whooping Cough among young children lies in the numbers who succumb annually to these diseases, and in the serious after-effects which often follow them.

Number of Unvaccinated Children.—Of all the children examined, 637 “entrants” and 328 “leavers” were found to be unvaccinated—equal to 19.2 per cent. of the total. The comparative figures for the past six years are as follows :—

	Percentage who were unvaccinated.		
	Entrants.	Leavers.	Total.
	%	%	%
1909.....	14	18	16
1910.....	11	19	15
1911.....	11	18	13
1912.....	13	18	15
1913.....	21	14	19
1914.....	28	12	19

The Vaccination Act, 1907, provides (Section 1) that no parent or other person shall be liable to a penalty for neglecting to have a child vaccinated, if within four months of the birth of the child he makes a *statutory declaration* of conscientious objection.

All the “entrants” examined in the past year were born subsequent to the passing of the above Act, and come within the scope of the Section quoted. This undoubtedly accounts for the growth in the percentage of unvaccinated children during late years.

(C) SPECIAL MEDICAL INSPECTION.

The previous section has dealt with "routine" medical inspection, which is concerned with the examination of each individual school child, whether healthy or delicate, at certain periods of school life. The present section is devoted to "special" inspections—the examination of children selected, for example, by teachers and attendance officers as requiring examination for particular objects.

Special Inspections in the Schools.

Cases presented by Teachers—As they are brought into daily contact with children in the schools, teachers have much opportunity of detecting symptoms of delicacy or disease; opportunity which many teachers make excellent use of. At each "routine inspection" visit to a school the teacher may bring forward any such children to be examined by the medical inspector.

During the past year 286 children were presented for inspection in this way. The defects found requiring treatment were the following :—

	Cases.
Defective vision	65
Skin diseases (including Ringworm) ..	27
Eye diseases (other than sight defects)	22
Nasopharyngeal obstruction	18
Defective hearing	10
Other ear diseases	9
Defective teeth	7
Pediculosis	5
Tuberculosis (non-pulmonary)	3
Deformity	1
Oral sepsis	1
Incontinence	1
Gastritis	1
Anæmia	1
Adenitis	1
Chickenpox	1
Pharyngitis	1

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Re-inspections.—At each visit paid to a school for the purpose of holding a "routine" inspection, children who at a previous inspection during the year were found to be defective, and who are still attending the same school, are re-examined. This practice is a valuable factor in the following-up process. During the past

year, owing to changes of staff and consequent loss of time, resulting in no school department being visited more than once, no re-inspections were made.

Dental Inspections.—During the year visits of inspection were paid to a number of schools by the Dental Officer. The children inspected were practically all at the ages six, seven, or eight years. Inspection was confined to these age-groups with a view to the detection of commencing caries in the first permanent molar teeth. The Dental Officer devotes three mornings per week—Tuesday, Thursday, and Friday—to inspection and treatment. Thursday mornings are given to inspections in the schools: the cases found to require treatment being attended to on subsequent Tuesdays and Fridays at the Dental Clinic.

Ten departments were visited, and 1,356 children were inspected (536 Boys and 820 Girls). The ages were as follows:—

Age 6.....	518
„ 7.....	717
„ 8.....	119
„ 9.....	2

Total 1,356

The number of sound, saveable, and unsaveable teeth recorded at these inspections is shown below:—

Temporary Teeth—

Sound	14,014
Saveable	972
Unsaveable	6,015

Permanent Teeth—

Sound	7,599
Saveable	1,076
Unsaveable	161

Only 141 children out of the 1,356 inspected had a sound dentition—a percentage of 10.4. That is, 89.6 per cent. of the children had some degree of caries.

Special Visits to Schools re Outbreak of Infectious Diseases.—Visits are paid to the schools from time to time whenever there is evidence of any infectious disease spreading therein. At these visits the members of the affected classes are inspected; and, in the case of Diphtheria, throat swabs are taken and examined bacteriologically with a view to detecting early and “carrier” cases.

The early detection of outbreaks of Measles, Whooping Cough, and other non-notifiable infectious diseases is greatly facilitated by the weekly returns received from the Head Teachers.

Special Inspections at Clinics.

Children sent by Teachers, Attendance Officers, Health Nurses, etc.—At the Clinic held at the Municipal Buildings on Saturday mornings, and to a certain extent at Clinics held during the week, children who are specially sent for examination by the Attendance Officers, Nurses, or Head Teachers are seen. Many of these are children who have been irregular in attendance at school and who are examined with regard to their fitness to return or to attend regularly. The Attendance Department has frequently to deal with instances of parents keeping older children at home—ostensibly on account of illness, but really to help with housework, run errands, etc. A considerable loss of grant is prevented annually by such cases being submitted at once to a medical examination and certified “fit to attend.” Slight ailments which, with adequate attention, are quickly curable, are often neglected and given as an excuse for protracted absence.

On the other hand, many children sent to the Clinic are found to be suffering from grave diseases which require immediate treatment.

The Clinic also affords opportunities for the re-examination of cases previously inspected, where this is considered desirable.

During the year, 830 children attended the Clinic for the purposes of *inspection* only (that is, none of these children received *treatment* at this Clinic; the cases treated are dealt with later in the report). Of these, 100 were found, on examination, to be suffering from no ailment or defect. The defects found in the remaining 730 are enumerated below:—

Eyes : defective sight	157
other disease or defect	41
Ears : defective hearing	44
disease	9
Skin diseases	54
Speech defects	6
Heart defects.....	10
Nose and throat : obstruction	180
other defects	36
Acute infectious diseases	31
Malnutrition : from insufficient food	1
from other causes	25
Tuberculosis : pulmonary	52
non-pulmonary	14
suspected pulmonary.....	22
Lung disease (not tuberculous)	20
Enlarged glands (do.)	25
Deformities	10

Defective teeth	80
Nervous diseases	28
Mentally defective or Backward.....	13
Other defects	69

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Chronic Absentees.—These constitute another group, with regard to whom new arrangements have been made during the year. They are children who, owing to some tedious or chronic ailment, are for periods of many months or years unfit to attend school. Hitherto many of these cases have been classed as “excluded indefinitely” ; the result being that some were lost sight of, owing to change of address for example, many were away from school for longer periods than was necessary, and no record existed from which it could be ascertained how many such children of school age were in the Borough, and when each was likely to return to school.

Towards the end of the year a complete list of these children was compiled from all the available sources. All the children have been examined and, where necessary, excluded from school. Exclusion has been fixed for definite periods of one or two quarters ; and the children will be re-examined at the end of these periods—special times being set apart for their examination at the beginning of January, April, July, and October of each year.

With this system it is hoped that a check will be kept on unnecessary absenteeism ; and the best interest of the children from the physical point of view is served, as they will be subject to medical examination at regular intervals.

The following is a summary of the conditions from which the children who were on this list at the end of the year were suffering:—

Tuberculosis	180
Mental conditions	18
Nervous diseases, chorea epilepsy, etc...	12
Eye defects	11
Anæmia and malnutrition	8
Deaf and dumb	5
Deaf and blind.....	1
Heart disease	4
Other defects	16

Total 255

(D) TREATMENT.

Organised measures for the amelioration of the health of a community may be grouped for practical purposes under three heads :—

Detection.

Treatment.

Prevention.

The work of the school medical service is concerned with those particular members of the community who are aged principally five to fourteen years, and who are receiving education at the public elementary schools. This work falls naturally into the three groups which contain the health work of the community as a whole. The detection as early as possible of diseases and defects ; the provision of treatment for the removal of those defects ; and the prevention of their recurrence, or spread to other individuals—these are the main objects of the school medical service.

The first of these objects for which need was recognised was *prevention*, limited to certain defined infectious diseases—scarlet fever, diphtheria, etc. ; and organised work of a preventive nature within the limits indicated has been carried out for many years in this and other Health Areas. The need for measures for the prevention of other conditions—defective sight, tuberculosis, anæmia, spinal curvature, to mention a few—was not recognised until later, and even now is still but inadequately provided for.

The second to receive attention was *detection*. “Medical inspection of school children,” the primary object of which was the discovery of existing defects, was introduced as a compulsory measure in this country by the Education (Administrative Provisions) Act, 1907.

The progress of investigations in this connection could not fail to reveal the urgent need for the establishment of some organised measures for the *treatment* of the defects found ; and gradually the lines along which treatment schemes could most efficiently be developed have become defined. The South Shields Education Authority may look back with satisfaction on having quickly recognised the primary requirements of the Area, and on having established a very comprehensive system of Clinics. Among further ameliorative measures, the provision of Open-air School accommodation is receiving earnest consideration at the present time.

In the following paragraphs there is detailed the amount of treatment that has been obtained for school children during the past year, as a result of, or following on, medical inspection. It will be seen that this treatment has been obtained in three main ways :—

1. By private arrangement between the parents and private medical practitioners—which is advised in every instance, and pressed for wherever the parents are in a position to make such arrangements.
2. Through existing charitable and other institutions.
3. At the Clinics provided by the Education Authority.

Treatment of Defects found at Routine Inspections.

Defects requiring skilled treatment.—As was stated earlier in this report, 794 children were found at routine inspections held during the year to have defects which called for medical treatment, out of 5,018 children examined, the number of defects being 818.

By the end of the year, skilled treatment had been obtained for 340 of these defects, or 42 per cent. ; and unskilled treatment for 36 more (4 per cent.) ; a total of 376, or 46 per cent.

Comparing this with the results given in my last annual report, it will be found that of the defects found at routine inspections during 1913, 35 per cent. had received treatment by the end of March, 1914—that is, three months after the end of the year ; so that the results for 1914 show a distinct advance. It is to be hoped, however, that these results will in turn be much improved on, and that it will be possible, at the end of 1915, to state that a much higher percentage of the defects discovered during the year have been remedied. Better arrangements for “following-up” will be available ; and it will be possible to deal with larger numbers of cases at the Clinics.

The following is a summarised analysis, as on December 31st, with reference to the 818 defects found at routine inspections during the past year :—

	No.	Per cent.
Obtained skilled treatment	340	42
Obtained unskilled treatment	36	4
Improved without treatment.....	15	2
Left school permanently, left town, etc.	118	14
Carried forward for “following-up” in 1915	309	38
Total	<u>818</u>	<u>100</u>

Source of treatment of above defects.—More than half of the defects which had been remedied by the end of the year had been dealt with at the Municipal Clinics (including the Tuberculosis Clinic). The figures are given below :—

<i>Source.</i>	<i>No. of Defects.</i>	<i>Percentage of Total Treated.</i>
Municipal Clinics.....	196	58
Private medical or dental practitioners	104	31
Ingham Infirmary	28	8
Other institutions	12	3
	<u>340</u>	<u>100</u>

Treatment of Defects found at Special Inspections.

As has been stated earlier in this report, 174 defects were found during the year at special inspections in the schools or at the clinics. The following Table deals with these defects as on 31st December, 1914 :—

	<i>No.</i>	<i>Per cent.</i>
Obtained skilled treatment	72	41
Obtained unskilled treatment	7	4
Improved without treatment.....	8	5
Left school permanently, left town, etc.....	11	6
Carried forward for “ following-up ” in 1915	76	44
	<u>174</u>	<u>100</u>

The source of treatment was as follows :—

<i>Source.</i>	<i>No. of Defects.</i>	<i>Percentage of Total Treated.</i>
Municipal Clinics	40	56
Private medical or dental practitioners	24	33
Ingham Infirmary	7	10
Other institutions	1	1
	<u>72</u>	<u>100</u>

Municipal Treatment Clinics : Organisation.

Clinics for the treatment of children of school age were provided by the Education Authority and opened in October, 1913. In accordance with the requirements of the Board of Education, all medical, surgical, and dental treatment is under the administrative supervision of the principal School Medical Officer. On the executive staff are the two assistant Medical Officers, and an Operating Surgeon and Dental Surgeon, both part-time.

In addition, the Tuberculosis Clinic provided by the Local Authority is available for the treatment of children suffering from Tuberculosis

Nature of Treatment.—The scope of the treatment provided includes—

- (a). Operative treatment for Nasopharyngeal Obstruction.
- (b). Dental treatment : chiefly the conservative treatment of children aged 6 to 8 years ; special attention being paid to the early treatment and preservation of the first permanent molars.
- (c). Medical treatment of Skin diseases.
- (d). Treatment of Eye defects : refraction work, prescribing of spectacles, etc.
- (e). Treatment of Tuberculosis.

Premises.—These are as follows :—

- (a). Surgical Clinic, Wesley Street.
- (b). Dental Clinic, Wesley Street.

A description of these two clinics was published in my last annual report.

(c). General Treatment and Eye Clinics, Medical Officer's Department, Municipal Buildings.—These have been provided in an extension of the premises of the Department. The accommodation includes a waiting-room, and a consulting-room which has been fitted with drug cupboard, wash-up, etc. A dark cabinet has been constructed for ophthalmic purposes, with complete apparatus and appliances for sight testing by retinoscopy.

Scope, Methods, etc.—The Authority's scheme of treatment is applicable only to children whose parents cannot afford to pay in full for private treatment. The circumstances of each case are enquired into, and those who can afford to contribute a part of the cost of treatment are expected to do so. The children of those who cannot afford to pay are treated free. The written consent of parents is obtained before any operative or dental treatment is carried out. Children are examined with regard to their suitability for treatment at routine inspections, and at special inspections either in the schools or at the inspection clinics.

Contributions of Parents.—The scale of contributions detailed in last year's annual report continues in force.

Time Table.—Clinics are held at the following times :—

Inspection Clinics—

General Inspection Clinic—Saturdays, 9—12.

Dental Inspection Clinic—Fridays, 9—10.

Treatment Clinics—

General Treatment and Eye Clinics—Tuesdays and Thursdays, 2—5.

Dental Treatment Clinic—Tuesdays and Fridays, 9—12.

Surgical Treatment Clinic—Mondays, 2—5.

Records.—Full records are kept on a card index system, with detailed descriptions of clinical conditions; nature of treatment; results of treatment; visit of nurses to homes; etc.

Treatment Clinics : Work done during 1914.

(a). *Surgical Clinic.*—The cases treated numbered 107, and were as follows :—

Tonsils and adenoids removed	68
Adenoids removed	21
Tonsils removed	3
Adenoids and one tonsil removed	7
One tonsil removed	3
Adenoids, one tonsil, and inferior turbinates removed ..	1
Tonsil and turbinates removed	1
Adenoids and turbinates removed	2
Nasal spur removed	1

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(b). *Dental Clinic.*—During the year 705 children received treatment. Of these, 405 were cases arising out of the Dental Officer's inspections in the schools, and 300 were "special" cases sent by the Teachers, Nurses, etc. The nature of the treatment carried out is given below; the figures show the number of *teeth* extracted, filled, etc., and the distribution of this work as between boys and girls :—

	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Temporary teeth extracted	349	290	639
Permanent teeth extracted	138	132	270
Fillings	361	348	709
Silver nitrate dressings	34	39	73
Supernumary teeth extracted ..	3	2	5
Root fillings.....	..	3	3
Root dressings.....	..	3	3
Sedative dressings .....	..	1	1
Aconite and iodine applications..	1	..	1
Lanced gum.....	1	..	1
Other treatment .....	..	1	1
Nitrous oxide gas administered..	..	5	5

Before leaving this condensed statement of a year's work skilfully and sympathetically carried out by Mr. Diack, the School Dental Officer, I should like to emphasize the fact that only two half-days per week are available for treatment at the Dental Clinic. It will be obvious that this amount of time given to the dental treatment of the school children of the Borough can only be regarded as being in the nature of a beginning. The

important bearing which the condition of the teeth has upon the general health of a child is now well appreciated, and need not be further emphasised here. An extension of the work of dental treatment, say by securing the services of another part-time officer, would be fully justified by the success of the work which has already been completed.

(c). *General Treatment Clinic*.—The number of children who were under treatment at this clinic during the year was 655. The diseases treated numbered 716, as follows :—

Eye diseases (other than defects of sight)	114
Ear : defective hearing	6
disease	47
Skin : ringworm	149
other diseases	353
Nose and throat : obstruction	6
other conditions	3
Tuberculosis, non-pulmonary	3
Enlarged glands (not tuberculous)	1
Abscesses	19
Cretinism	1
Other defects	14
	<hr/>
	716

The eye diseases under treatment were chiefly conjunctivitis and blepharitis, but included cases of corneal ulcer, styne, etc. The ear diseases were, with one exception, cases of otorrhœa. Among the skin diseases treated were cases of alopecia, eczema, psoriasis, favus, and lichen. Among the “other defects” were cases of ganglion, septic infection, wounds, and cellulitis.

(d). *Eye Clinic*.—The total number of cases dealt with was 124.
 Number of cases of refraction done 103
 Number of cases where spectacles were prescribed 91
 Number of orders given for the supply of spectacles free
 or at a reduced rate..... 112

(Of these 21 were given in respect of spectacles prescribed elsewhere than at the Clinic.)

(e). *Tuberculosis Clinic*.—At this Clinic 111 children under sixteen years of age were treated during the year. These were—

Pulmonary cases.....	94
Non-pulmonary cases.....	17

Total 111

(f). *Contributions received from Parents.*—The contributions received amounted to £30 11s. 7d.

	£	s.	d.
Surgical Clinic	9	15	6
Dental Clinic	14	7	0
General Clinic	1	12	1
Eye Clinic.....	4	17	0
	<hr/> £30 11 7 <hr/>		

(E) MISCELLANEOUS.

Future Increase in Scope of Routine Inspection.

In a circular, dated 18th August, 1913, addressed to Local Education Authorities, the Board of Education intimated that for the year beginning on the 1st April, 1915, and subsequent years, the routine medical inspection of an additional age-group would be required. At present the two groups for which routine medical inspection is required are :—

- (1) Entrants (chiefly aged 4, 5, and 6).
- (2) Leavers (chiefly aged 12 and 13).

The third group which is to be added consists of children between 8 and 9 years of age :

- (3) Intermediate (aged 8).

The addition of this new group, when it takes effect, will mean a 50 per cent. increase in the work of routine medical inspection : and a corresponding increase in the work of the clinics, “ following-up,” clerical work, etc.

In view of the fact that the introduction of the new age-group would necessitate the appointment of an additional medical officer, and taking into consideration the scarcity of medical practitioners occasioned by the War, the Education Authority decided to suggest to the Board of Education the postponement for the present of any scheme of extension in the South Shields area. This proposal met with the approval of the Board.

Grants for Inspection and Treatment.

The principles on which the payment of grants is based are those introduced in the Regulations issued by the Board of Education on 18th August, 1913.

Grants are now assessed on the basis of work done and payments made during the year ending 31st March ; and are paid in respect of all the work of the school medical service—inspection, treatment, and cognate work.

Where, in the Board's opinion, the provision made for the school medical service is adequate, and its working is efficient,

grant will be paid at the rate of *one-half of the expenditure* ; in other cases the Board may either pay at a lower rate or withhold the grant.

Work of Nursing Staff.

During the year the number of the nursing staff was increased from three to four, with the object of having one nurse for each of the four health districts of the Borough ; each of these four nurses to devote half of her time to school work, the remainder being given to work in connection with tuberculosis and the prevention of infant mortality.

However, owing to the outbreak of war, the increase of staff did not take effect in practice until after the end of the year ; two of the nurses being called up for military duty, and a considerable period elapsing before substitutes were appointed.

Six half-days per week are given to attendance at the school clinics ; the remaining time is taken up with weighing and measuring children in the schools before routine inspection ; visits to schools to make investigations regarding verminous children, and visits to the homes of the children for the purpose of " following-up " cases requiring treatment.

Measures for Dealing with Verminous Children.

The following are the arrangements for dealing with verminous children :—

(1). Weekly visit to each school by the Health Nurse for the district. Children found to be verminous are given a card to take home, on which are printed instructions for the treatment of the condition. If these are followed a cure can be effected in a week.

(2). The children are seen at the next weekly visit of the Nurse. If satisfactory steps have not been taken, an urgent notice is served, pointing out that if an attempt has not been made to remedy the child's condition within 24 hours, it will be necessary for the Education Authority to effect cleansing compulsorily.

(3). If the notice is not attended to, the children are removed from school and cleansed, the hair being cut short if this is considered necessary. The cleansing is carried out at the special Cleansing Station at Cone Street School by an attendant, under the supervision of the district Health Nurse.

(4). Should a child who has been cleansed as above again be allowed to become verminous, proceedings are instituted against the parents (Children Act, 1908, sec. 122).

Exceptional Children.

Under this heading may conveniently be classed all children who are unable adequately to benefit by the teaching in ordinary

elementary schools, or may require special educational methods other than those provided in such schools.

The chief groups of these children are :—

- Children with very defective sight.
- Children with defective hearing.
- Dumb children.
- Mentally defective children (including feeble-minded children, imbeciles, and idiots).
- Mentally subnormal children (dull or backward).
- Epileptic children.
- Physically defective children (including those suffering from tuberculosis, and cripples).
- Physically subnormal or weakly children.
- Industrial school children.

Below is given a statement of the numbers of such children who were examined for special schools during the year, of those who were attending such special schools at the end of the year, and of children not attending school.

(a). *Children examined for special schools.*—3 children were examined during the year with regard to suitability for admission to Industrial schools.

(b). *Children attending special schools.*—At the end of the year, the number of South Shields children in special schools was as follows :—

	Boys.	Girls.	Total.
Special schools for Blind	5	1	6
„ „ Deaf and Dumb ..	5	4	9
„ „ Mentally Defective	4	3	7*
„ „ Epileptics	4†	..	4
Industrial schools	53	26	79
Total	71	34	105

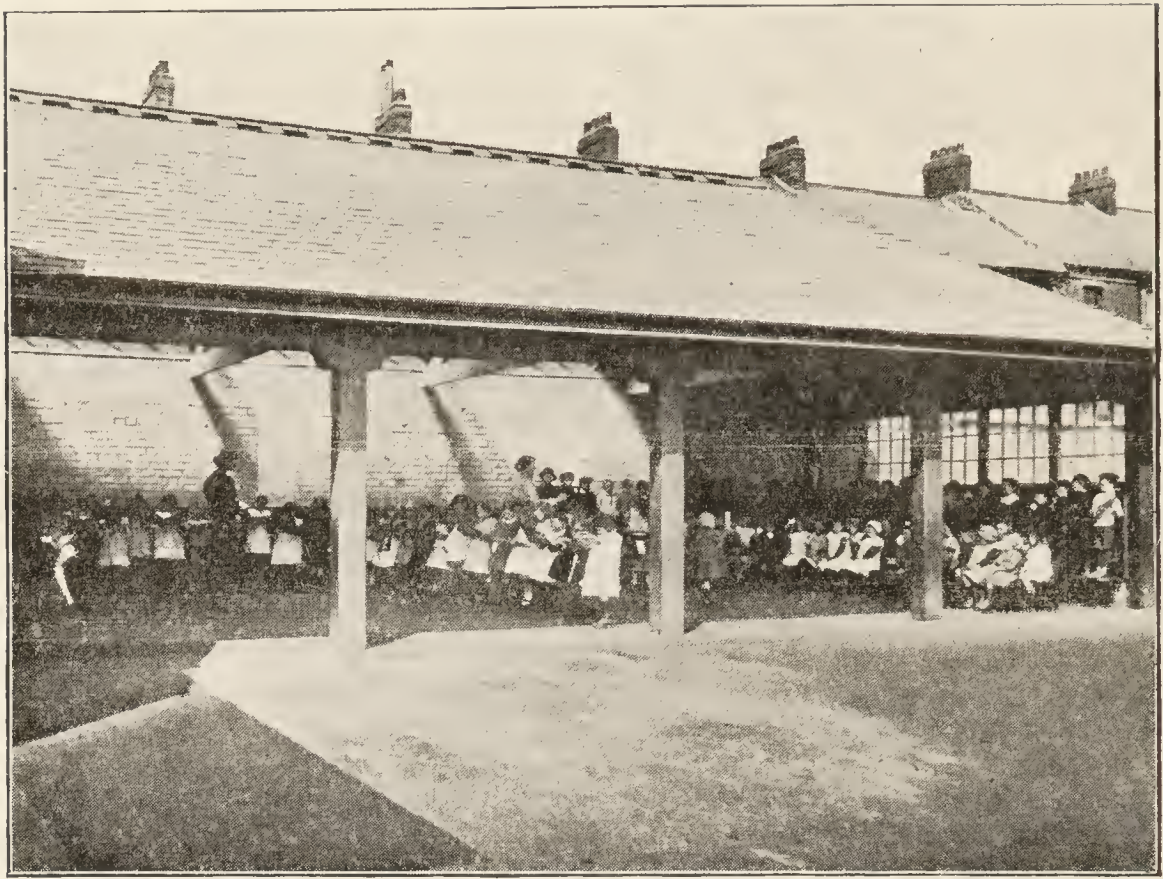
* Three of these sent by Guardians. † Sent by Guardians.

Open-air Schools.

The consideration of the value of open-air schools, and of the desirability of establishing such schools for South Shields children, has for some time occupied the attention of the Education Committee.

As the subject was dealt with in some detail in my last Annual Report, a brief reference to the character of such schools will be sufficient here.

Broadly speaking, open-air teaching is especially needed by two groups of children :—



OPEN-AIR TEACHING VERANDAH.
MORTIMER ROAD INFANTS' SCHOOL.



OPEN-AIR TEACHING VERANDAH.
SECOND VERANDAH CAN BE SEEN IN DISTANCE.

(1). Those children—a considerable number—who are suffering from tuberculosis, and who cannot be allowed to attend the ordinary schools on account of the risk of spreading infection.

(2). The much larger group of children who are suffering from non-infectious forms of tuberculosis, or from anæmia, general debility or similar conditions, or who are convalescing after acute illness.

It is for the second class of child that the open-air school proper is of such conspicuous value.

There are two main *types* of open-air school :—

1. Residential, or
2. Non-residential,

the former having arrangements for the children sleeping at the school. Affording as it does facilities for uninterrupted supervision, and continuous treatment, the residential open-air school must necessarily have the better results.

The Grants provided for open-air schools are two-fold :

(1). Grants payable under the Regulations applicable to Special Schools for Defective, etc., Children ;

(2). Grants payable under the Regulations dealing with Medical Treatment and Care. The Regulations issued on 18th August, 1913, state that the Board of Education will make grants to Local Education Authorities in respect of the medical treatment and care of children *suffering from tuberculosis or other ailments* for which open-air treatment is specially suitable, in attendance at open-air schools certified by the Board. (The grants made under these regulations will be *in addition* to the grants payable under the regulations applicable to Schools for Defective Children). The maximum grant under the heading is at the rate of £3 per unit of average attendance in the case of Day Schools, and at the rate of £8 per unit of average attendance in the case of Residential Schools.

The value of *open-air teaching in ordinary schools* was emphasised in a previous report. The extension of open-air methods to the ordinary day schools, in the form of classes held in the playgrounds, cannot have other than good results. During the past year two large verandahs were constructed at Mortimer Road Infants' School, in which out-door teaching is now being carried on ; a photograph of these is shown opposite.

It is necessary, however, to keep in view the very distinct limitations of this adaptation of ordinary schools, as compared with the true open-air school. There is the initial difficulty and relatively high cost of alterations ; the playground space, generally already limited, is encroached upon ; only a small proportion of the children can have the advantages of the open-air teaching, or if all the classes are taken out-of-doors in rotation then each child

has a comparatively short period each week. Again, the existing schools are situated for the most part in the midst of densely populated town areas, and not among rural surroundings. Finally, and this point is as important as any, the curriculum of the open-air school proper is drafted on different lines from that of the ordinary elementary school.

Provision of Meals for Necessitous Children.

During the year 405 children were provided with free meals: 15,638 dinners being supplied at a total cost to the Authority of £97 14s. 2d.—the cost per meal being about 1½d.

The meals were obtained from local caterers at three centres—at Laygate, Mill Dam, and Tyne Dock. Meals were granted to children where the income of the family was less than 3s. per head per week.

New powers were conferred upon Local Education Authorities by the Education (Provision of Meals) Act, 1914—dated 7th August, 1914. The Act provides that a local education authority may, *without any application to the Board of Education* spend out of the rates *such sums as may be necessary* to meet the cost of the provision of food under section 3 of the Education (Provision of Meals) Act, 1906. Also that the powers of a local education authority under the 1906 Act, as amended by the Act of 1914, shall be exerciseable in respect of children attending a public elementary school within their area, *both on days when the school meets and on other days*.

Previous to the passing of this Act, the sanction of the Board of Education had to be obtained before expenditure was incurred on the provision of meals; this expenditure was limited to the produce of a halfpenny rate; and meals could only be supplied on days when the schools were open.

Circulars from the Board of Education were issued under dates 7th August, 1914, and 15th August, 1914 (Circulars 854 and 856) dealing with the provision of meals. These circulars emphasised the need for preparations to meet distress caused by dislocation of trade and other circumstances arising out of the War. Circular 856 dealt with the organisation of schemes for the feeding of children, and contained specimen dietaries.

The *local arrangements* were reconsidered in detail by the Free Meals Sub-Committee. An appreciation of undesirable features in the arrangements which have obtained hitherto—chiefly the unsuitability of the premises in which the meals were supplied, and the absence of adequate supervision—decided the Sub-Committee to recommend a re-organisation on an improved basis for

adoption during 1915; the new arrangements to include the provision of a central canteen under the supervision of the Education Authority.

Unofficial and other Agencies dealing with School Children.

Children's Care Committee.—This Committee continued its work throughout the year under the chairmanship of Mrs. Hilton. The number of children with regard to whom visits were paid to homes was 183. The number of visits paid was 268. The conditions dealt with were as follows:—General neglect, 61; poverty, 16; insufficient footgear, 27; insufficient clothing, 19; insufficient food, 17; general delicacy, 5; other matters, 57.

National Society for the Prevention of Cruelty to Children.—During the year 294 complaints, of which 291 proved to be well founded, were dealt with by the local branch of the Society. 879 children were concerned. 60 of the complaints were reported by officials of the Education Authority.

The nature of the complaints were as follows:—

Neglect and starvation	273
Abandonment	2
Exposure	1
Assault and ill-treatment	11
Exposure for begging purposes, etc.....	1
Immoral surroundings	3
Other wrongs	3

Shoeless Children Fund.—The last annual report of the Fund, prepared by the Honorary Secretary, Chief Constable Scott, shows that during the year 515 children—272 boys and 243 girls—were each supplied with one pair of boots and one pair of stockings.

Municipal Swimming Baths.

During the year, 20,601 attendances were made at the Swimming Baths by school children. The corresponding figure for last year was 22,390; the decrease of 1,789 attendances may be partly accounted for by the fact that since the second week of the War the troops stationed in the town were given free access to the Baths—a privilege which was very largely taken advantage of. Free passes for the year were granted to 26 school children, for proficiency in life-saving.

Examination of Candidates for Bursaries and Pupil Teacherships.

Thirty-six candidates were examined during 1914—7 boys and 29 girls. As regards physique they were classified:—

	Boys.	Girls.	Total.
Above the average	5	15	20
Average	1	8	9
Below the average	1	6	7
Total	7	29	36

Seven girls and one boy were found to be unvaccinated.

Seven candidates were wearing suitable glasses for defects of vision ; three others were found to have defective sight, and were recommended to obtain spectacles.

The condition of the teeth was noted ; in 19 cases the teeth were in good condition, in 15 moderate, in 2 bad. Where necessary candidates were instructed to have attention for dental defects.

TABLE A.—NUMBER OF CHILDREN EXAMINED AT ROUTINE INSPECTIONS.

Age	Entrants.				
	4	5	6	Other ages (over 6.)	Total.
Boys	143	702	233	41	1,119
Girls	117	686	264	52	1,119
Total	260	1,388	497	93	2,238

Age	Leavers.				
	12	13	14	Other ages.	Total.
Boys	763	675	15	7	1,460
Girls	747	559	13	1	1,320
Total	1,510	1,234	28	8	2,780

External Eye Diseases.	No disease	1,088	1,097	2,185	97.6	1,425	1,282	2,707	97.4	2,513	2,379	4,892	97.5
	Blepharitis	13	8	21	.9	13	14	27	1.0	26	22	48	1.0
	Conjunctivitis	6	5	11	.5	..	2	2	.1	6	7	13	.3
	Corneal Opacities .....	..	..	..	..	..	..	..	..	..	..	..	..
	Other diseases	12	9	21	.9	22	22	44	1.6	34	31	65	1.3
Ear Disease.	No disease	1,103	1,108	2,211	98.8	1,441	1,304	2,745	98.7	2,544	2,412	4,956	98.8
	Otorrhœa R.	3	4	7	.3	6	4	10	.4	9	8	17	.3
	" L.	9	5	14	.6	9	7	16	.6	18	12	30	.6
Teeth.	" both	4	2	6	.3	4	5	9	.3	8	7	15	.3
	Sound	129	135	264	11.8	270	253	523	18.8	399	388	787	15.7
	Less than 4 decayed ..	484	506	990	44.2	899	832	1,731	62.3	1,383	1,338	2,721	54.2
Lungs.	More than 4 decayed ..	506	478	984	44.0	291	235	526	18.9	797	713	1,510	30.1
	Sepsis	18	12	30	1.3	61	69	130	4.7	79	81	160	3.2
	No disease	1,086	1,080	2,166	96.8	1,435	1,303	2,738	98.5	2,521	2,383	4,904	97.7
Nervous System.	Chronic Bronchitis and Bronchial Catarrh ..	25	31	56	2.5	23	13	36	1.3	48	44	92	1.8
	Tuberculosis .....	..	..	..	..	..	..	..	..	..	..	..	..
	Suspected Tuberculosis	7	7	14	.6	2	3	5	.2	9	10	19	.4
Skin Diseases.	Other diseases	1	1	2	.1	..	1	1	.0	1	2	3	.1
	No disease	1,115	1,113	2,228	99.6	1,453	1,319	2,772	99.7	2,568	2,432	5,000	99.6
	Epilepsy .....	..	2 (1)	2	.1	2 (2)	..	2	.1	2	2	4	.1
Nervous System.	Chorea	1	..	1	.0	..	1	1	.0	1	1	2	.0
	Other diseases	3	4	7	.3	5	..	5	.2	8	4	12	.2
	No disease	1,082	1,064	2,146	95.9	1,418	1,287	2,705	97.3	2,500	2,351	4,851	96.7
Skin Diseases.	Ringworm Body	1	..	1	.0	1	1	2	.1	2	1	3	.1
	" Head	11	9	20	.9	3	1	4	.1	14	10	24	.5
	Impetigo	13	36	49	2.2	8	20	28	1.0	21	56	77	1.5
Skin Diseases.	Scabies .....	..	..	..	..	4	1	5	.2	4	1	5	.1
	Other diseases	12	10	22	1.0	26	10	36	1.3	38	20	58	1.2

TABLE B. (Continued)—PHYSICAL CONDITION OF CHILDREN EXAMINED AT ROUTINE INSPECTIONS.

Condition.	Entrants.			Leavers.			Total.		
	Boys.	Girls.	Total.	Boys.	Girls.	Total.	Boys.	Girls.	Total.
Rickets.	1,101	1,115	2,216	1,453	1,315	2,768	2,554	2,430	4,984
	13	3	16	7	5	12	20	8	28
	5	1	6	..	..	..	5	1	6
Deformities	1,108	1,104	2,212	1,443	1,314	2,757	2,551	2,418	4,969
	11	15	26	17	6	23	28	21	49
Tuberculosis Non-Pulmonary.	1,118	1,116	2,234	1,451	1,316	2,767	2,569	2,432	5,001
	..	3 (3)	3	3 (1)	3 (2)	6	3	6	9

	1	..	1	6	1	7	7	1	8
Speech.	1,097	1,113	2,210	1,423	1,310	2,733	2,520	2,423	4,943
	21	4	25	10	1	11	31	5	36
	1	..	1	27	9	36	28	9	37
	..	1	1	..	..	..	..	1	1
	..	1	1	..	..	..	..	1	1
Mental Condition.	..	..	..	465	320	785	..	..	..
	..	..	..	838	845	1,683	..	..	..
	..	..	..	152	149	301	..	..	..
	..	..	..	5	6	11	..	..	..
Heart & Circulation.	1,111	1,110	2,221	1,438	1,277	2,715	2,549	2,387	4,936
	7	2	9	11	24	35	18	26	44
	..	5	5	7	10	17	7	15	22
	1	1	2	..	6	6	1	7	8
	..	1	1	4	3	7	4	4	8
Rickets.	1,101	1,115	2,216	1,453	1,315	2,768	2,554	2,430	4,984
	13	3	16	7	5	12	20	8	28
	5	1	6	..	..	..	5	1	6

Deformities	1,108	1,104	2,212	1,443	1,314	2,757	2,551	2,418	4,969
	11	15	26	17	6	23	28	21	49
Tuberculosis Non-Pulmonary.	1,118	1,116	2,234	1,451	1,316	2,767	2,569	2,432	5,001
	..	3 (3)	3	3 (1)	3 (2)	6	3	6	9

	1	..	1	6	1	7	7	1	8
Speech.	1,097	1,113	2,210	1,423	1,310	2,733	2,520	2,423	4,943
	21	4	25	10	1	11	31	5	36
	1	..	1	27	9	36	28	9	37
	..	1	1	..	..	..	..	1	1
	..	1	1	..	..	..	..	1	1
Mental Condition.	..	..	..	465	320	785	..	..	..
	..	..	..	838	845	1,683	..	..	..
	..	..	..	152	149	301	..	..	..
	..	..	..	5	6	11	..	..	..
Heart & Circulation.	1,111	1,110	2,221	1,438	1,277	2,715	2,549	2,387	4,936
	7	2	9	11	24	35	18	26	44
	..	5	5	7	10	17	7	15	22
	1	1	2	..	6	6	1	7	8
	..	1	1	4	3	7	4	4	8

APPENDIX.

1. Summaries of certain Statistics re Births, Deaths, and Infectious Diseases.

Table 1—Deaths during 1914 : Causes.

- „ 2—Deaths during 1914 : Seasonal and Ward Distribution.
- „ 3—Deaths during 1914 : in Institutions, Uncertified Deaths, etc.
- „ 4—Births and Deaths during 1914 and previous years.
- „ 5—Birth-rates and Death-rates for past forty-four years.
- „ 6—Infant Deaths during 1914 : Causes and Ages.
- „ 7—Infant Deaths during 1914 : Causes and Ward Distribution.
- „ 8—Infectious Diseases during 1914 : Cases removed to Hospital, Ages, and Ward Distribution.

2. Summaries of the Work of the Sanitary Inspectors during 1914.

Table 9—Visits.

- „ 10—Defects, etc., for which notices were issued.
- „ 11—Structural Work.

3. Summary of Meteorological Observations during 1914.

Table 12—Observations taken daily at the North Marine Park, Bents Park, and Health Department.

4. List of Dwellings dealt with under Housing Acts in 1914.

Table 13—List of Houses.

5. Tuberculosis Clinic.

Table 14—Cases Examined and Treated during November and December, 1913.

TABLE 1.—CONTINUED.

CAUSES OF DEATH.	All Ages.	AGES AT DEATH.														55 to 60 upwards.					
		0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-	2-	3-	4-	Total under 5 years.	5-	10-	15-	20-	25-		35-	45-	55-	65-	75-
71. Infantile convulsions (under 5 years):— A. Convulsions with teething B. Other infantile convulsions 72. Chorea 73. A. Hysteria, Neuralgia, Sciatica . . B. Neuritis 74. A. Idiocy, Imbecility B. Cretinism C. Cerebral tumour D. Other diseases of the nervous system 75. Diseases of the eyes and annexa . . 76. A. Mastoid disease B. Other diseases of the ear III.—DISEASES OF THE CIRCULATORY SYSTEM. 77. Pericarditis 78. A. Acute myocarditis B. Infective endocarditis C. Other acute endocarditis 79. A. Valvular disease B. Fatty degeneration of the heart C. Other organic disease of the heart	12 61 . . 4 . . . 1 1 . . 2 .<																				

TABLE 1.—CONTINUED.

CAUSES OF DEATH,	All Ages.	AGES AT DEATH.													55 and upwards.	55 to 60						
		0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-	2-	3-	4-	Total under 5 years.	5-	10-	15-	20-			25-	35-	45-	55-	65-	75-
94. A. Pulmonary apoplexy and infarction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B. Pulmonary oedema and congestion	5	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	1	..	..	1	2
C. Hypostatic pneumonia	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
D. Collapse of lung (3 months and over)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95. Gangrene of the lung	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
96. Asthma	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	1	1
97. Pulmonary emphysema	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
98. A. Fibroid disease of lung	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B. Other diseases of the respiratory system	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V.—DISEASES OF THE DIGESTIVE SYSTEM.																						
99. A. Diseases of the teeth and gums	2	2	..	..	2	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..
B. Thrush, Aphthous stomatitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
C. Parotitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
D. Other diseases of the mouth and annexe	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
100. A. Tonsillitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
B. Ludwig's angina	1	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
C. Other diseases of the pharynx	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
101. Diseases of œsophagus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
102. Perforating ulcer of stomach	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..

TABLE 1.—CONTINUED.

CAUSES OF DEATH.	All Ages.	AGES AT DEATH.															55 and upwards.	55 to 60				
		0-3 Months.	3-6 Months.	6-12 Months.	Total under 1 year.	1-1 year.	2-	3-	4-	Total under 1 year.	5-	10-	15-	20-	25-	35-			45-	55-	65-	75-
175. Injury by other crushing (vehicles railways, land slides, &c.)	9	..	..	..	..	2	..	2	..	4	..	..	..	1	1	..	1	..	2	..	..
176. " animals	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
177. Starvation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
178. Excessive cold	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
179. Effects of heat	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
180. Lightning	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
181. Electricity (lightning excepted)	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
182. Homicide by firearms	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
183. " cutting or piercing instruments	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
184. " other means	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
185. Fractures (cause not specified)	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
186. Other violence	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
XIV.—ILL-DEFINED CAUSES.																						
187. Dropsy	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
188. A. Syncope (aged 1 year and under 70)	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	1
B. Sudden death (not otherwise defined)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
189. A. Heart failure (aged 1 year and under 70)	3	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..
B. Atrophy, debility, marasmus (aged 1 year and under 70)	2	..	..	..	..	1	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..
C. Teething	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
D. Pyrexia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
E. Other ill-defined deaths	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
F. Cause not specified	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
TOTALS	1955	257	93	132	482	159	66	39	16	762	74	31	52	54	108	160	162	200	213	116	23	

TABLE 2.—DEATHS DURING 1914: SEASONAL AND WARD DISTRIBUTION.

CAUSES OF DEATH.	Total.	YEAR, 1914.				WARDS.															
		First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Unknown.	
		562 27	463 11	448 18	415 11	157 5	136 3	110 2	117 3	133 10	168 9	154 10	83 2	169 6	76 3	174 5	173 5	117 2	114 2	7 ..	
All Causes { Certified Uncertified	1888 67	1 27	2 11	4 18	8 11	2 5	.. 3	.. 2	2 3	.. 10	1 9	1 10	2 2	1 6	2 3	1 5	173 5	117 2	114 2	7 ..	
Enteric Fever	15	1	2	4	8	2	..	2	2	.. <td><td>1</td><td>2</td><td>1</td><td>2</td><td>1</td><td>1</td><td>1</td><td>..</td><td>2</td><td>..</td></td>	<td>1</td> <td>2</td> <td>1</td> <td>2</td> <td>1</td> <td>1</td> <td>1</td> <td>..</td> <td>2</td> <td>..</td>	1	2	1	2	1	1	1	..	2	..
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	30	14	11	5	3	8	..	1	2	2	6	4	2	1	4	9	2	2	..	..
Scarlet Fever	24	13	5	3	5	1	2	1	2	6	6	9	1	4	9	2	5	9	1	..	
Whooping Cough	57	17	32	3	6	2	..	2	1	3	3	3	4	4	4	4	2	2	1	..	
Diphtheria and Croup	16	4	3	3	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Influenza	23	7	8	3	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Erysipelas	4	2	1	3	1	1	14	10	9	11	10	6	1	1	4	4	4	2	1	..	
Phthisis (Pulmonary Tuberculosis)	145	41	29	30	45	1	14	10	4	11	9	6	21	7	14	6	6	1	7	..	
Tuberculous Meningitis	21	6	5	6	4	2	6	5	4	5	10	3	3	1	1	5	2	1	1	..	
Other Tuberculous diseases	43	7	11	11	14	3	2	5	5	3	3	..	6	2	2	2	2	2	3	..	
Cancer, Malignant Disease	93	14	40	20	19	5	7	9	8	3	6	3	10	10	11	2	3	8	2	..	
Rheumatic Fever	7	..	3	2	2	..	..	1	1	1	..	..	1	..	1	1	1	..	..	..
Meningitis	21	8	5	5	3	..	7	1	1	1	1	..	..	2	3	3	..	1	..	..
Organic Heart disease	162	50	40	34	38	10	19	8	6	15	14	12	10	13	3	13	20	9	9	1	
Bronchitis	165	70	44	19	32	11	9	9	6	19	14	14	6	18	4	18	16	13	8	..	
Pneumonia (all forms)	185	84	40	21	40	19	8	17	9	20	17	17	4	8	5	21	15	11	11	..	
Other diseases of Respiratory organs	26	10	7	4	5	2	1	3	3	1	1	1	2	1	1	3	3	1	2	..	
Diarrhoea and Enteritis	129	6	7	95	21	7	5	4	7	10	15	14	1	11	3	15	16	12	9	..	
Appendicitis and Typhlitis...	5	2	2	1	3	1	1	..	..	..	3	..	..	..	..	1	1	1	1	..
Cirrhosis of Liver...	10	4	3	..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Alcoholism...	5	2	3	..	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..
Nephritis and Bright's Disease	71	16	16	18	21	6	10	3	8	4	6	2	1	11	2	6	7	2	3	..	
Puerperal Fever	4	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Accidents and Diseases	11	4	..	4	3	..	..	..	..	2	..	3	..	1	..	1	2	1	1	..
of Pregnancy and Parturition...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Congenital Debility and Malformation, including Premature Birth	155	35	45	40	35	15	11	4	4	11	17	17	4	11	4	18	18	7	14	..	
Violent deaths, excluding Suicide	68	24	15	11	18	11	4	6	2	4	4	5	3	7	2	2	9	2	5	2	
Suicide	4	..	2	2	2	..	1	26	38	24	1	1	1	37	19	35	33	23	25	2	
Other defined diseases	446	140	96	118	92	40	27	..	1	..	48	42	27	2	..	..	..	..	..	..
Diseases ill-defined or unknown	10	7	1	2	..	..	..	..	1	..	2	..	1	2	..	..	3	3	..	1
Total	1955	589	474	466	426	162	139	112	120	143	177	164	85	175	79	179	178	119	116	7	

TABLE 3.—DEATHS DURING 1914 IN INSTITUTIONS, UNCERTIFIED DEATHS, etc.

CAUSES OF DEATH.	Deaths in Institutions in the Borough.		Deaths in Institutions outside the Borough.		Deaths Certified by Coroner.		Uncertified Deaths.		Transferable Deaths.	
	Residents.	Non-Residents.	In S. S. Union Poor Law Institution.	Other Institutions.	Residents.	Non-Residents.	Residents.	Non-Residents.	Inward.	Outward.
Enteric Fever	10	..	..	..	..	..	..	..	..	..
Smallpox	..	..	..	..	..	..	..	..	..	..
Measles	1	..	..	..	..	..	..	..	..	..
Scarlet Fever	9	..	..	..	..	..	..	..	..	..
Whooping Cough	..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup	2	..	..	..	..	..	..	..	..	1
Influenza	..	..	1	..	1	..	..	..	1	1
Erysipelas	..	..	..	..	1	..	..	..	..	..
Phthisis (Pulmonary Tuberculosis)	..	..	18	5	1	..	1	..	23	1
Tuberculous Meningitis	..	..	1	..	1	..	..	..	1	..
Other Tuberculous diseases	1	..	4	2	..	..	1	..	6	..
Cancer, Malignant Disease	8	..	7	1	1	..	..	..	8	2
Rheumatic Fever	..	..	..	..	..	..	..	..	..	..
Meningitis	..	..	..	..	..	..	1	..	..	..
Organic Heart disease	..	..	21	1	6	..	8	1	26	1
Bronchitis	..	..	15	..	..	..	3	..	15	..
Pneumonia (all forms)	3	..	19	..	..	..	4	..	21	1
Other diseases of Respiratory organs	..	..	2	1	..	..	..	..	2	..
Diarrhoea and Enteritis	1	..	3	..	..	..	4	..	6	..
Appendicitis and Typhlitis	3	..	..	..	..	..	..	..	..	..
Cirrhosis of Liver...	1	..	..	..	..	..	..	..	..	..
Alcoholism	..	..	..	..	5	..	..	..	..	..
Nephritis and Bright's Disease	..	..	10	4	..	..	1	..	14	..
Puerperal Fever	..	..	..	..	..	..	..	..	..	..
Other Accidents and Diseases	1	..	1	..	..	..	..	..	1	..
of Pregnancy and Parturition	..	..	..	..	..	..	..	..	..	..
Congenital Debility and Malformation,	1	..	1	4	..	..	9	..	5	..
including Premature Birth	20	4	2	2	66	4	..	..	15	5
Violent Deaths, excluding Suicide	..	..	1	..	4	..	..	..	1	..
Suicide	12	1	50	19	8	..	31	1	7	3
Other defined diseases	..	..	..	..	1	..	4	..	1	..
Diseases ill-defined or unknown	..	..	..	..	..	..	..	..	..	..
Total	73	5	156	39	93	4	67	2	217	15

TABLE 4.—POPULATION, BIRTHS, AND DEATHS FOR 1914 AND PREVIOUS YEARS.

(L.G.B. TABLE I.)

Year	Popula- tion estimated to middle of each year.	Births.			Total Deaths registered in the Borough		Transfer- able Deaths		Net Deaths belonging to the Borough.			
		Uncor- rected Num- ber.	Net.				Of Non-Residents registered in the Borough.	Of Residents not registered in the Borough.	Under 1 year of age.		At all ages.	
			Num- ber.	* Rate	Num- ber.	* Rate.			Num- ber.	Rate per 1,000 Net Births.	Num- ber.	* Rate
1	2	3	4	5		7	8	9	10	11	12	13
1907	105,659	3276	..	..	1717	16.3	..	..	..	..	..	..
1908	106,448	3481	..	..	1598	15.0	..	..	..	..	..	..
1909	107,234	3388	..	..	1597	14.9	..	..	..	..	..	..
1910	108,045	3404	..	..	1451	13.4	..	..	..	..	..	..
1911	108,844	3279	3300	30.3	1687	15.5	13	216	484	147	1890	17.4
1912	109,678	3322	3352	30.6	1550	14.1	18	220	356	106	1752	16.0
1913	110,513	3478	3495	31.1	1803	16.1	21	229	408	117	2011	17.9
1914	110,604	3503	3517	31.8	1753	15.9	15	217	482	137	1955	17.7

* Rates in Columns 5, 7, and 13 calculated per 1,000 of estimated population. For years before 1911 some of the corrected rates are not available.

NOTE.—The deaths included in Column 6 of this Table are the whole of those registered during the year as having actually occurred within the Borough. The deaths included in Column 12 are the number in Column 6, corrected by the subtraction of the number in Column 8, and the addition of the number in Column 9. Deaths in Column 10 have been similarly corrected by subtraction of the deaths under 1 year included in the number given in Column 8, and by addition of the deaths under 1 year included in the number given in Column 9.

“ **Transferable Deaths** ” are deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided. The deaths of persons without fixed or usual residence in South Shields, *e.g.*, casuals, are not included in Columns 8 or 9, except in certain instances under 3 (*b*) below. The number of transferable deaths of “ non-residents ” which have been deducted is stated in Column 8, and the number of deaths of “ residents ” registered outside the Borough which have been added in calculating the net death-rate, is stated in Column 9.

The following special cases arise as to Transferable Deaths :—

(1) Persons who die in Institutions for the sick or infirm, such as hospitals, lunatic asylums, workhouses, and nursing homes (but not almshouses) are regarded as residents of the district in which they had a fixed or usual residence at the time of admission. If the person who died in an Institution had no fixed residence at the time of admission, the death is not transferable. If the patient had been directly transferred from one such institution to another, the death is transferable to the district of residence at the time of admission to the first Institution.

(2) The deaths of infants born and dying within a year of birth in an Institution to which the mother was admitted for her confinement are referred to the district of fixed or usual residence of the parent.

(3) Deaths from Violence are referred (*a*) to the district of residence, under the general rule ; (*b*) if this district is unknown, or the deceased had no fixed abode, to the district where the accident occurred, if known ; (*c*) failing this, to the district where death occurred, if known ; and (*d*) failing this, to the district where the body was found.

TABLE 5—BIRTH-RATES, INFANT MORTALITY RATES, AND DEATH-RATES FROM VARIOUS CAUSES, 1871-1914.

(All rates since 1901 have been re-calculated.)

YEAR.	Population.	Birth-rate.	Death-rate.	PRINCIPAL EPIDEMIC DISEASES.								Phthisis	Other Tuberculous Diseases.	Cancer.	Bronchitis.	Pneumonia.	Pleurisy.	Influenza.	Deaths under 1,000 Births 1 year per
				Total.	Smallpox.	Measles.	Scarlet Fever.	† Diphtheria	Whooping Cough.	"Fever"	† Diarrhoea								
Mean 1871-1880	..	43.1	25.5	6.0	.86	.42	1.44	.12	.78	.79	1.59	1.91	..	..	..	..	..	..	164
Mean 1881-1890	..	38.8	20.5	2.3	.01	.34	.45	.10	.44	.19	.78	1.84	..	..	..	..	..	..	140
1891	78,920	37.4	22.1	2.85	..	.90	.11	.29	.61	.20	.73	1.54	.89	.39	2.12	1.81	.01	.41	176
1892	80,530	37.0	19.4	1.62	.01	.30	.12	.10	.33	.20	.56	1.51	1.52	.60	1.76	1.33	.06	.32	143
1893	82,284	35.4	22.4	3.15	.04	.39	.38	.06	.36	.35	1.56	1.99	1.28	.48	2.22	1.68	.01	.24	180
1894	84,077	35.9	17.3	1.37	..	.19	.39	.05	.11	.20	.43	1.41	.82	.71	1.95	.89	.05	.12	158
1895	85,910	35.1	21.2	3.36	..	.29	.18	.21	.90	.35	1.43	1.65	1.09	.62	3.25	1.48	.06	.49	187
1896	87,784	35.7	18.5	2.49	..	.92	.18	.10	.42	.27	.58	1.61	1.11	.61	1.78	1.15	.04	.05	165
1897	89,699	35.9	17.2	1.83	..	.29	.15	.09	.25	.16	.88	1.40	.92	.59	1.57	.89	.02	.11	154
1898	91,656	37.0	21.5	3.09	..	.57	.25	..	.77	.39	1.11	1.58	.88	.64	1.92	1.80	.01	.46	182
1899	93,657	36.0	20.7	2.33	..	.04	.21	.06	.13	.47	1.41	1.57	.68	.59	1.57	2.16	.03	.30	175
1900	95,703	36.3	21.4	2.32	..	.55	.21	.12	.67	.20	.55	1.83	.79	.73	1.91	1.52	.03	.39	160
Mean 1891-1900	..	36.1	20.1	2.45	.00	.44	.22	.11	.46	.28	.93	1.60	1.00	.63	2.00	1.47	.03	.29	166
1901	97,800	36.8	20.6	3.36	..	.68	.60	.14	.10	.22	1.60	1.63	.71	.68	1.35	1.19	.04	.18	169
1902*	101,801	36.9	19.8	2.66	.04	.93	.38	.06	1.02	.06	.17	1.81	.66	.65	1.36	1.54	.05	.12	149
1903	102,561	35.4	17.6	1.04	.01	.15	.12	.16	.03	.10	.49	1.72	.73	.71	1.70	1.37	.05	.17	132
1904	103,327	35.9	18.9	1.84	.07	.27	.08	.12	.62	.09	.60	1.59	.85	.65	1.69	1.42	.10	.26	144
1905	104,099	33.6	17.1	2.07	.04	.23	.06	.23	.61	.22	.68	1.21	.62	.68	1.56	1.31	.03	.19	145
1906	104,876	33.7	19.0	2.94	..	1.04	.06	.29	.37	.09	1.10	1.58	.72	.68	1.39	1.35	.04	.24	150
1907	105,659	31.0	18.0	1.53	..	.46	.09	.18	.51	.04	.26	1.69	.75	.73	1.43	1.33	.04	.33	133
1908	106,448	32.7	16.8	1.98	..	.30	.08	.22	.46	.08	.85	1.29	.67	.82	1.24	1.04	.06	.37	133
1909	107,244	31.6	16.6	1.50	..	.35	.18	.19	.34	.04	.41	1.21	.63	.73	1.27	1.13	.05	.29	138
1910	108,045	31.5	15.2	1.59	.02	.16	.06	.06	.59	.06	.56	1.25	.70	.87	1.10	1.17	.05	.29	111
Mean 1901-1910	..	33.9	17.9	2.03	.02	.45	.17	.16	.47	.10	.66	1.50	.71	.72	1.41	1.28	.05	.25	140
Mean 1871-1910	..	38.0	21.0	3.20	.22	.41	.57	.12	.54	.34	.99	1.71	..	..	..	..	..	..	153
1911	108,844	30.3	17.4	2.07	..	.37	.01	.08	.21	.04	1.36	1.19	.58	.82	1.33	1.56	.03	.26	147
1912	109,678	30.6	16.0	1.39	..	.58	.05	.05	.46	.05	.18	1.53	.39	.71	1.50	1.25	.05	.22	106
1913	110,513	31.1	17.9	1.59	..	.51	.28	.07	.10	.06	.57	1.33	.66	.90	1.48	1.28	.02	.36	117
1914	110,604	31.8	17.7	2.23	..	.27	.22	.14	.52	.14	.95	1.31	.58	.84	1.49	1.67	.06	.21	137

* The Borough was extended, November, 1901.
† Since 1891, Membranous Croup has been included under Diphtheria.
‡ Diarrhoea and Enteritis (under 2 years of age) since 1905.

TABLE 6.—DEATHS OF INFANTS UNDER ONE YEAR :
CAUSES AND AGES.

(L.G.B. TABLE IV.)

CAUSES OF DEATH.	Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 4 Weeks	1-3 Months	3-6 Months.	6-9 Months.	9-12 Months.	Total Deaths under 1 Year.
All Causes : Certified	98	29	19	12	158	83	88	73	57	459
Uncertified	6	2	1	1	10	6	5	1	1	23
Smallpox .....	..	..	..	..	..	..	..	..	..	..
Chickenpox .....	..	..	..	..	..	..	..	..	1	1
Measles .....	..	..	..	..	..	..	1	..	2	3
Scarlet Fever .....	..	..	..	..	..	..	..	..	..	..
Whooping Cough .....	..	..	..	..	..	6	4	6	5	21
Diphtheria and Croup .....	..	..	..	..	..	..	..	..	..	..
Erysipelas .....	..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis .....	..	..	..	..	..	..	1	..	1	2
Abdominal Tuberculosis .....	..	..	..	..	..	..	5	..	4	9
Other Tuberculous diseases ..	..	..	..	..	..	..	1	1	..	2
Meningitis (<i>not Tuberculous</i>) ..	..	..	..	..	..	..	2	1	2	5
Convulsions	10	10	6	3	29	18	9	3	5	64
Laryngitis .....	..	..	..	..	..	..	..	..	..	..
Bronchitis .....	..	2	2	2	6	12	18	18	10	64
Pneumonia (all forms) .....	..	..	1	..	1	4	10	15	12	42
Diarrhœa .....	..	..	..	..	..	14	17	17	5	53
Enteritis	1	..	1	..	2	9	9	4	3	27
Gastritis .....	..	..	..	..	..	4	2	1	2	9
Syphilis .....	..	..	..	..	..	..	..	..	1	1
Rickets .....	..	..	..	..	..	..	..	..	..	..
Suffocation, Overlying .....	..	..	..	..	..	2	1	..	..	3
Injury at Birth	1	..	..	..	1	..	..	..	..	1
Atelectasis	2	2	..	..	4	..	..	..	..	4
Congenital Malformations	5	1	..	1	7	1	2	1	..	11
Premature Birth	58	8	6	7	79	7	1	..	..	87
Atrophy, Debility & Marasmus	26	6	3	..	35	10	7	1	4	57
Other causes	1	2	1	..	4	2	3	6	1	16
Total	104	31	20	13	168	89	93	74	58	482

Net Births in the Year :—

Legitimate 3,399
Illegitimate..... 118

Net Deaths in the Year :—

Legitimate Infants 464
Illegitimate Infants 18

**TABLE 7.—DEATHS OF INFANTS UNDER ONE YEAR:
CAUSES AND WARD DISTRIBUTION.**

CAUSES OF DEATH.	WARDS.															Total.
	Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Unknown.	
ALL CAUSES—																
Certified.....	35	26	20	21	31	35	46	18	38	14	56	48	35	35	1	459
Uncertified	4	2	...	1	2	4	6	...	2	...	1	...	1	...	...	23
Smallpox .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chickenpox	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Measles	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	3
Scarlet Fever.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough.....	1	1	...	...	4	2	...	...	1	1	3	2	5	1	...	21
Diphtheria and Croup .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculous Meningitis.....	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Abdominal Tuberculosis	1	1	...	...	1	1	...	...	1	...	...	2	1	1	...	9
Other Tuberculous diseases.....	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2
Meningitis (<i>not Tuberculous</i>).....	...	1	...	...	...	...	...	...	1	2	1	...	...	...	...	5
Convulsions	5	1	3	4	1	5	9	9	8	4	8	5	4	...	...	64
Laryngitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	4	1	3	2	7	4	7	2	5	1	11	5	7	5	...	64
Pneumonia (all forms)	3	3	5	2	5	1	7	2	3	...	1	3	3	4	...	42
Diarrhoea	2	3	...	3	2	5	5	...	5	2	8	6	6	6	...	53
Enteritis	2	1	1	3	2	3	3	...	1	...	4	3	2	2	...	27
Gastritis	1	1	...	1	...	1	...	...	2	...	...	2	1	...	...	9
Syphilis .....	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Rickets.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suffocation, Overlying	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...	3
Injury at birth.....	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1
Atelectasis .....	...	1	...	...	...	...	1	...	1	...	...	...	...	1	...	4
Congenital Malformations .....	...	1	...	...	...	4	1	1	...	...	...	1	...	3	...	11
Premature Birth	8	9	2	2	5	9	10	2	7	4	9	11	1	8	...	87
Atrophy, Debility and Marasmus	7	1	2	2	6	4	6	1	4	...	9	6	6	3	...	57
Other causes	1	1	3	2	...	2	1	1	...	...	3	1	...	...	1	16
Total Deaths under one year	39	28	20	22	33	39	52	18	40	14	57	48	36	35	1	482
Number of Births.....	212	273	164	190	217	261	349	165	310	198	386	328	222	240	2	3517
Infant Mortality Rate	184	103	122	116	152	149	149	109	129	71	148	146	162	146	..	137
Total Deaths at all ages.....	162	139	112	120	143	177	164	85	175	79	179	178	119	116	7	1955

TABLE 8—CASES OF INFECTIOUS DISEASE NOTIFIED, AND CASES REMOVED TO HOSPITAL, IN SOUTH SHIELDS DURING THE YEAR, 1914, CLASSIFIED ACCORDING TO WARD AND AGE.

(L.G.B. TABLE II.)

Notifiable Diseases.	Cases notified in whole Borough.						Total cases notified in each Ward.											No. of cases removed to Hospital from each Ward.																	
	At following Ages—Years.						Shields.	Beacon.	St. Hilda.	Hadrian.	Holborn.	Laygate.	Victoria.	Bents.	Rekendyke.	Westoe.	Deans.	Tyne Dock.	Simonside.	West Park.	Totals.														
	At all Ages.																																		
	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 45.	45 to 65.																65 and upwards.													
Smallpox													
Cholera													
Plague													
Diphtheria (including Membranous Croup) ..	72	35	28	5	4	..	6	2	1	6	5	3	..	2	7	5	6	7	5	11	..														
Erysipelas	70	2	7	9	19	25	7	6	4	1	5	2	..	..	4	7	7	4	9	4	..												
Scarlet Fever	1023	13	271	670	50	17	2	85	41	64	64	45	..	..	69	93	89	107	83	82	..												
Typhus Fever	65	..	1	19	24	6	..	..	2	3	..	4	..	..	5	7	5	2	6	6	..										
Enteric Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Relapsing Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal Fever	4	..	..	1	3	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..					
Cerebro-spinal Meningitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Poliomyelitis	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ophthalmia Neonatorum ..	19	..	..	..	..	..	..	2	3	3	..	1	..	..	1	..	1	1	..	..	..											
Pulmonary Tuberculosis ..	354	1	8	92	103	31	7	26	25	26	15	35	..	..	30	14	40	22	15	24	..												
Other forms of Tuberculosis ..	133	9	36	55	18	3	..	14	12	13	5	9	11	1	11	7	12	9	2	8	..														
Totals.....	1741	43	353	872	201	191	67	14	89	116	94	100	165	94	130	133	160	152	120	135	48	61	37	49	54	39	56	35	64	40	70	86	68	52	759

TABLE 9.—SUMMARY OF REPORTS OF SANITARY INSPECTORS.

(a) VISITS.

NATURE OF VISITS.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	TOTALS
General District Inspection (including Housing Inspection, and Inspection of Underground Rooms)	4177	3040	6506	6143	19866
Inspection of Works in progress	879	419	862	254	2414
Interviews and Appointments . . . . .	..	303	..	76	379
Investigation of Complaints of Nuisances	99	78	168	161	506
Testing Drains	29	18	29	4	80
Special Inspections of—					
Seamen's Lodging Houses . . . . .	..	135	8	73	216
Common Lodging Houses . . . . .	..	14	74	67	155
Houses-let-in-Lodgings . . . . .	..	..	12	..	12
Factories	23	3	7	2	35
Workshops (including Bakehouses, etc.)	94	..	7	9	110
Workplaces (including Fried Fish Shops, etc.)	76	..	9	..	85
Home-workers' Premises . . . . .	..	..	..	1	1
Military Billets	35	7	23	16	81
Picture Halls	12	..	18	5	35
Schools	1	..	..	3	4
Stables and Allotment Gardens	401	182	37	98	718
Other Premises . . . . .	..	..	2	..	2
Visits <i>re</i> cases of Infectious Disease—					
On Notification of cases, on Removal to Hospital, or on Disinfection of Premises	517	570	380	403	1870
<i>Re</i> Home-treated Cases	129	272	53	104	558
School-reported Cases	77	45	4	10	136
Cases of Tuberculosis	14	30	44	67	155
Contacts—Smallpox	3	23	2	23	51
Other Infectious Diseases	17	2	4	8	31
Taking Samples with Food Inspector	148	..	..	..	148
Total Visits	6731	5141	8249	7527	27648

TABLE 10.—SUMMARY OF REPORTS OF SANITARY INSPECTORS.

(b) PRELIMINARY NOTICES ISSUED.

NATURE OF DEFECTS.	W. Clark.	R. W. Weir.	R. Ayre.	W. Hill.	TOTALS.
Dwellings: improperly converted into tenements	1	1	1	1	4
defective floors, walls, roofs, spouting, ventila- tion, lighting, etc.....	49	47	75	63	234
overcrowded .....	..	..	4	3	7
damp.....	4	7	14	6	31
neglect of cleanliness.....	2	2	10	5	19
absent water supply .....	..	1	..	2	3
Drains: defective (traps, gullies, etc.).....	14	6	16	4	40
choked or foul	14	6	27	24	71
Yards: defective and unpaved	29	14	42	21	106
neglect of cleanliness.....	1	..	16	15	32
other nuisances in yards.. ..	2	..	2	..	4
Privies: insufficient provision.. ..	..	..	6	..	6
to convert. ....	..	..	1	..	1
disrepair	61	23	25	11	120
neglect of cleanliness.....	9	8	12	11	40
W.C.'s: defective structure and fittings	2	2	4	2	10
insanitary "Fowler" closets .....	..	..	4	1	5
neglect of cleanliness.....	..	..	5	2	7
Wash-ups: defective traps, waste-pipes, etc.....	140	34	47	46	267
Rain-Water Cisterns (underground):					
foul, defective, etc... ..	10	3	4	13	30
Outbuildings: disrepair.....	14	22	12	11	59
neglect of cleanliness.....	1	4	9	4	18
other matters.....	6	8	12	8	34
Seamen's Lodging Houses:					
neglect of cleanliness.....	..	2	..	..	2
Common Lodging Houses:					
defective floors, walls, roofs, etc. ....	..	..	8	3	11
yard: defective and unpaved .....	..	..	2	1	3
privy: defective .....	..	..	1	..	1
w.c.: defective .....	..	..	..	1	1
neglect of cleanliness.....	..	..	1	1	2
other matters.....	..	..	3	..	3
Factories: w.c. insanitary.....	..	..	..	1	1
water flowing over street	1	..	..	..	1
Workshops: using uncertified underground bakehouse..	Mr.	Pollock.	..	..	1
defective spouting and ventilation .....	..	..	..	2	2
Workplaces: neglect of cleanliness	2	1	1	1	5
Stables: defective structure	7	..	..	..	7
to remove manure weekly.....	11	..	1	..	12
neglect of cleanliness.....	1	..	..	..	1
keeping animals	1	..	6	4	11
other nuisances.....	1	1	..	..	2
TOTAL DEFECTS.....	384	192	371	267	1214
<i>Preliminary</i> notices issued during the year to 466 owners..	348	169	285	209	1011
to 338 occupiers	36	23	86	58	203
<i>Statutory</i> notices issued during the year to 30 owners..	38	17	4	16	75
— occupiers .....	..	..	..	..	..

(c) STRUCTURAL IMPROVEMENTS EFFECTED.

NATURE OF WORK.	W. Clark.	R. W. Weir.	R. Ayte.	W. Hill.	TOTALS.
Dwellings and Lodging Houses :					
rooms and cellars closed .....	..	2	10	60	72
rooms demolished .....	..	..	22	54	76
repairs to walls, floors, roofs, spouting, etc.	32	89	90	121	332
sites concreted .....	..	..	..	3	3
Drains : abolished .....	..	..	4	2	6
provided	12	8	..	3	23
relaid	6	1	30	16	53
repaired .....	..	4	27	6	37
chambers, gullies, traps, etc., provided or renewed	20	21	57	23	121
Yards and Areas : relaid	12	4	18	8	42
repaired	2	6	2	5	15
provided .....	..	..	..	1	1
Privy Receptacles : newly provided .....	..	..	1	..	1
rebuilt or repaired	6	3	6	11	26
W.C.'s. : newly provided (complete)	2	..	6	1	9
provided in place of privy middens (4)	1	2	1	..	4
" " privy receptacles (10) .....	..	..	7	3	10
" " "Fowler" closets (5) .....	..	..	5	..	5
basins, cisterns, etc., replaced or repaired	3	1	9	7	20
Dustbins : provided (fixed 19, portable 4) .....	..	5	11	7	23
Urinals : reconstructed or repaired	3	..	..	1	4
Baths : waste-pipes or traps provided	5	..	..	..	5
Washups : of metal, replaced by stoneware	54	5	20	11	90
newly provided (complete)	1	17	14	..	32
traps, waste-pipes, etc., provided or repaired	16	31	23	18	88
Lavatories : do. ....	..	..	2	..	2
Rain-water Cisterns, (underground) : filled in ..	7	9	4	10	30
cleaned out	5	1	..	2	8
repaired .....	..	1	..	1	2
(overhead) : abolished .....	..	..	5	..	5
Wash-houses : provided or built .....	..	..	1	..	1
rebuilt or repaired	10	..	..	10	20
floors relaid or repaired	17	1	12	4	34
Out-buildings : rebuilt or repaired	15	36	..	13	64
Factories, Workshops, etc. :					
repairs to walls, floors, roofs, spouting, etc.	2	..	..	..	2
Stables : manure-steads rebuilt or repaired	2	..	..	..	2
drains repaired	4	..	..	..	4
floors and yards cemented	6	..	..	..	6
TOTAL IMPROVEMENTS	243	247	387	401	1278

TABLE 12.—SUMMARY OF METEOROLOGICAL OBSERVATIONS, 1914, taken at 9 a.m. daily, at the North Marine Park, Bents Park, and Health Department, South Shields.

MONTH.	Barometer (corrected for elevation, temper- ature, etc.)	AIR TEMPERATURE.					HYGROMETER.		EARTH TEMPERA- TURE.		RAINFALL (in inches).			WIND.																	
		Average.		Absolute			Dry Bulb.	Wet Bulb.	Relative Humidity.	At 1 Foot Depth.	At 4 Feet Depth.	Total Fall.	No. of days rain fell .01" or more	Most in a day.		Average Daily Mileage.	Direction at 9 a.m. : Number of days.														
				Maximum.	Minimum.	Mean.								Date.	Minimum.		Date.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.					
		Maximum.	Minimum.	Mean.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.
		Maximum.	Minimum.	Mean.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.	Minimum.	Date.	Maximum.	Date.
January ..	30.077	43.8	36.0	39.8	56.0	31	25.2	1	39.9	37.8	83	38.5	43.7	1.64	18	0.50	9	365	1	2	4	3	6	5	9	1	3	3	1	1	1
February ..	29.540	50.6	39.8	44.6	56.2	1	32.2	25	43.6	41.3	84	42.1	44.8	0.77	13	0.22	22	359	1	1	1	2	9	10	4	1	3	3	1	1	1
March	29.480	48.2	37.9	42.8	62.4	31	28.6	10	42.3	39.7	80	41.2	44.4	2.13	21	0.40	16	330	3	4	1	1	6	2	12	4	1	3	1	1	1
April	29.988	58.1	41.9	50.4	66.4	20	33.9	17	51.2	46.4	70	48.4	47.2	0.65	9	0.23	6	313	2	1	1	4	3	2	11	3	1	3	1	1	1
May	30.034	58.3	44.6	52.0	74.5	18	33.0	19	53.1	48.3	71	53.6	51.1	1.22	12	0.36	8	295	4	6	1	2	4	4	7	3	1	3	1	1	1
June	30.027	64.2	49.6	57.4	80.9	30	42.0	7	58.4	53.8	74	59.3	54.3	3.08	13	0.88	9	320	7	3	1	4	1	7	6	1	3	1	1	1	1
*July	29.809	65.3	53.3	59.3	75.4	2	46.7	5	59.3	57.0	86	60.1	57.1	3.61	11	1.65	16	240	6	3	1	3	6	2	6	3	1	3	1	1	1
August	29.953	66.9	51.8	60.1	77.7	24	46.5	17	61.7	58.1	79	59.9	57.7	1.79	15	0.39	29	202	3	1	4	1	7	8	6	1	3	1	1	1	1
September ..	29.999	62.1	48.1	55.4	73.0	3	35.8	30	55.8	52.4	79	56.4	57.0	1.68	8	0.66	17	255	3	4	1	1	3	7	8	3	1	3	1	1	1
October ..	30.011	56.0	46.1	51.1	65.5	3	37.6	28	51.1	49.1	86	51.7	53.2	1.47	14	0.45	29	240	1	4	3	2	5	4	7	3	2	2	2	2	2
November ..	29.765	50.1	40.3	45.3	59.0	30	30.8	15	45.6	43.5	86	46.0	49.4	2.59	25	0.45	5 & 15	331	1	1	1	2	5	5	11	3	1	3	1	1	1
December ..	29.455	45.2	36.4	40.6	50.8	2	27.3	21	40.2	38.5	87	40.9	44.7	2.70	22	0.56	12	402	1	1	1	3	8	6	9	1	1	1	1	1	1
AVERAGES..	29.845	55.7	43.8	49.9	..	..	..	..	50.2	47.2	80	49.8	50.4	..	..	..	..	304	..	..	..	..	..	..	..	..	..	..	..	..	..
TOTALS ..	..	..	..	..	..	..	..	..	..	..	..	..	..	23.33	181	..	..	..	..	33	30	20	26	62	56	97	30	11	11	11	11

* Since July in Bents Park (see page 49).

TABLE 13.—PREMISES DEALT WITH DURING 1914 UNDER HOUSING ACTS.

Situation of Premises.	No. of Houses.	No. of Tenements.	M.O.H.'s Representation.	Closing Order made by Town Council.	Demolition Order made by Town Council.	Remarks.
11, Military Road	1	1	24/10/11	6/12/11	...	Not included in 1914 Demolition Orders.
Marshall's Quay, Shadwell Street.....	3	8	24/10/11	6/5/14	..	An appeal against the Closing Orders was made to the Local Government Board. but was withdrawn, 24-8-14. The Town Council is now considering the question of demolition. (Note: A previous appeal was made against <i>Demolition</i> Order.)
1, Mason's Lane	1	1	24/10/11	6/12/11	...	Demolition under consideration by Town Council.
23-24, Long Row	1	1	24/10/11	6/12/11	...	Repairs commenced after demolition considered by Town Council.
9, Tyne Street	1	1	28/2/12	3/4/12	...	Demolished and site cleared 8/9/14.
Spring Lane	1	1	28/2/12	3/4/12	5/2/13	Demolished to first floor level; debris tipped inside walls; site not cleared; 14/9/14.
15-31, Military Road.....	9	25	19/11/12	4/12/12	2/9/13	Town Council resolved to obtain tenders for pulling down and clearing the buildings away. 2/9/14.
Walker's Court	2	15	22/7/13	6/8/13	...	Demolition considered; repairs now being expedited.
31, 32, 33, Thames Street ...	1	4	16/9/13	...	...	Committee has not visited yet.
22-44, Somerset Street....	5	10	...	...	...	Sub-Committee visited. Action commenced under Sections 14, 15. Ownership changing. proceedings in abeyance.
25, Thrift Street and "Globe Inn"	2	7	29/6/14	2/12/14	...	Still tenanted.
14, Market Place	1	1	29/6/14	2/12/14	...	Empty when representation made.
2, Ferry Street, Old 'German Seamen's Home'	1	1	29/6/14	2/12/14	...	do. do.
14, Thrift Street.....	1	1	22/12/14	2/12/14	...	Still tenanted.
29, Shadwell Street	1	1	24/10/11	6/12/11	5/2/13	Demolished to first floor level; debris tipped inside walls; site not cleared; 11/11/14.
46, Queen Street	1	4	...	...	...	Converted into a store.
8, Coronation Street.....	1	3	...	...	...	do. do.
Back Percy Street.....	1	1	...	...	...	do. do.
1, 2, Claypath Cottages, Victoria Road.....	1	2	...	...	...	do. do.
35, 36, Thrift Street	1	1	...	...	...	Demolished and site cleared.
68, Commercial Road and 12, Windmill Hill.....	1	2	17/3/14	1/4/14	...	Plans submitted to Town Council.
69, Commercial Road. and 8, 10, Windmill Hill.....	1	7	17/3/14	1/4/14	...	do. do.
70-71, Commercial Road, and 4, 6, Windmill Hill ...	1	4	17/3/14	1/4/14	...	do. do.
109, 111, East Holborn, and 2, 3, Harrison's Court	1	1	17/3/14	1/4/14	...	...
1, Hill Street and 7, 8, Harrison's Court	1	2	17/3/14	1/4/14	...	Plans submitted and disapproved.
3, Hill Street and 9, Harrison's Court	1	2	17/3/14	1/4/14	...	do. do.
5, Hill Street, and 10, Harrison's Court.....	1	2	17/3/14	1/4/14	...	do. do.

TABLE 13.—Continued.

Situation of Premises.	No. of Houses.	No. of Tenem'ts.	M.O.H.'s Representation.	Closing Order made by Town Council.	Demolit'n Order made by Town Council.	Remarks.
5, Shepherding's Place	1	1	17/3/14	To be further considered at another meeting of the Housing and Health Visiting Sub-Committee.
8, Hill Street	1	1	17/3/14	...	...
10, Hill Street, and						
18, Back Hill Street	1	3	17/3/14	...	...
12, 14, 16, Back Hill Street	1	3	17/3/14	...	...
8, 10, 12, Wilson Street	1	6	17/3/14	...	...
20, 22, 24, Wilson Street	1	6	17/3/14	...	...
26, 28, 30, Wilson Street	1	6	17/3/14	...	...
32, 34, 36, Wilson Street	1	6	17/3/14	...	...
20, East Holborn	1	1	17/3/14	...	...
21, 23, East Holborn	1	1	17/3/14	Owner proposes to carry out repairs and alterations.
17, Archer's Hill, and						
1, Simon's Buildings	1	1	22/12/14	...	...
19, Archer's Hill, and						
2, Simon's Buildings	1	1	22/12/14	...	...
21, Archer's Hill, and						
3, Simon's Buildings	1	2	22/12/14	...	...
23, 25, Archer's Hill, and						
4, Simon's Buildings	1	6	22/12/14	...	...
2, Pan Bank	1	1	22/12/14	...	...
4, Pan Bank	1	1	22/12/14	Ruin Unoccupied as a dwelling for a number of years.
6, Pan Bank	1	1	22/12/14	...	...
1, 3, Pan Yard	1	2	22/12/14	...	...
107, 109, 111, West Holborn	1	2	22/12/14	...	...
16, Nelson's Bank, and						
10, Chapel Hill	1	2	20/2/12	6/3/12	...	
92, 94, East Holborn	1	3	22/4/13	7/5/13	...	
96, 98, East Holborn	1	5	22/4/13	7/5/13	...	
100, East Holborn	1	1	22/4/13	7/5/13	...	
11, 13, Laygate Street, and						
5-6, Swan's Stairs	1	3	22/7/13	6/8/13	...	Demolished during 1914.
15, Laygate Street, and						
7, Swan's Stairs	1	2	22/7/13	6/8/13	...	
17, 19, Laygate Street, and						
8-9, Swan's Stairs	1	4	22/7/13	6/8/13	...	
20, 22, 24, Johnson's Hill, and 11-12-13, Swan's Stairs	1	7	22/7/13	6/8/13	...	
26, 28, Johnson's Hill, and						
10, Swan's Stairs	1	3	22/7/13	6/8/13	...	
32, East Holborn	2	2	...	...	...
34, East Holborn	1	1	...	...	...
36, East Holborn	1	1	Demolished during 1914 in connection with extension of the Middle Dock Company's works. (Several of these houses had been inspected and recorded as "unfit").
38, East Holborn	1	1	...	...	...
62, East Holborn	1	1	...	...	...
64, 66, East Holborn	1	1	...	...	...
80, East Holborn	1	1	...	...	...
82, 84, 86, East Holborn	1	1	...	...	...
Bottle House Landing	1	1	...	...	...
1, Forrest Hill	1	4	19/12/11	3/1/12	...	
52, 54, Brunswick Street	1	4	19/4/10	4/5/10	...	
5, West Walpole Street	1	1	Closing Order determined 7/1/14 Plans submitted to and approved by Town Council for converting the premises into a warehouse. One room closed. Two rooms closed. Rendered habitable. do. Cellar closed. do.
7, 9, 11, West Walpole Street	1	2	...	...	...
33, 35, West Walpole Street	1	2	...	...	...
51, 53, Wilson Street	2	5	...	...	...
70, 72, Napier Street	1	1	...	...	...
25, Hudson Street	1	1	...	...	...

**TABLE 14.—TUBERCULOSIS CLINIC.—CASES EXAMINED AND TREATED
DURING NOVEMBER AND DECEMBER, 1913.**

(All were cases of Pulmonary Tuberculosis).

		Men.	Women	Under 16.		Total.
				Boys.	Girls.	
Total cases examined.	Insured	28	5	..	..	33
	Not Insured	..	2	6	4	12
	Total ..	28	7	6	4	45
Taken on for treatment.	Insured	20	4	..	..	24
	Not Insured	1	6	3	3	13
	Total ..	21	10	3	3	37
Discharged before end of year.	Insured	4*	1	..	..	5
	Not Insured	1	1	..	..	2
	Total ..	5	2	..	..	7
Remaining under treatment at end of 1913.	Insured	16	3	..	..	19
	Not Insured	..	5	3	3	11
	Total ..	16	8	3	3	30

* 3 to Sanatoria.

